



Phedikhola Rural Municipality
Office of Rural Municipal Executive
Syangja, Nepal

FINAL REPORT

Detailed Survey, Design, Estimate, Geological Study
and Initial Environmental Examination of
Sarketari-Aurkharka-Panchase Road
(CH- 0+000 to 6+000)

MAIN REPORT
VOLUME-I



Submitted by:
Realpath Engineering Consultancy (P.) Ltd.
Pulchowk-3, Lalitpur
2018

SALIENT FEATURES OF PROJECT

1. Name of Road : Sarketari-Aurkharka-Panchase Road

2. Location:

2.1 Geographical location:

- | | |
|----------------|----------------------------|
| i) Region: | Western Development Region |
| ii) Zone: | Gandaki |
| iii) District: | Syangja |

2.2 Geographical features:

- | | |
|------------------|--|
| i) Climate: | Sub Tropical to Upper Tropical |
| ii) Geology: | Hilly |
| iii) Hydrology: | Rainfed Catchment |
| iv) Meteorology: | Unevenly Distributed precipitation Controlled By Monsoon |

3. Classification:

- | | |
|------------------------|--|
| 3.1 Classification: | Rural Road |
| 3.2 Existing Surface : | Earthen, Rocky |
| 3.3 Proposed Surface : | Either Premix over base Course or RCC Slab |

4. Length Of Road

- | | |
|---------------------|----------|
| i) Length: | 7.1 Km |
| ii) Starting Point: | Ch:0+000 |
| iii) End Point: | Ch:7+100 |

5. Vehicle count

- | | |
|----------------------|----|
| 5.1 Vehicle per day: | NA |
|----------------------|----|

6. Cross Section:

- | | |
|-------------------------|---------------------------|
| 6.1 Carriage Way Width: | varying (4m to 6m) |
| 6.2 Footpath Width: | N/A |
| 6.3 Side Drain: | Rectangular Masonry Drain |

7. Pavement Design:

7.1 Design Criteria

- | | |
|------------------|---|
| i) Design Speed: | 30 kmph (20 kmph at new track from Ch 6+350 to 7+100) |
|------------------|---|

7.2 Subbase

- | | |
|--------------------|--------------------------------|
| i) Material: | Natural Sand Gravel (Screened) |
| ii) Thickness: | |
| Flexible pavement | 15 cm |
| Rigid pavement | 20 cm |
| For extra widening | 20 cm |

7.3 Base

- | | |
|----------------|----------------------------|
| i) Material: | Crusher Run Material (CRM) |
| ii) Thickness: | 15 cm |

7.4 Wearing Course

- | | |
|---|--|
| i) Premix Carpet over prime and tack coat | |
| ii) RCC Slab | |

SALIENT FEATURES OF PROJECT

8. Cross Drainage Structure:

8.1 NP3 Hume Pipe Culvert	Nos (proposed)
600mm internal diameter	36

9. Structures:

9.1 Gabion Wall	12973.75 m ³
9.2 Random Rubble Stone Masonry	3126.60 m ³

10. Earth Work

10.1 E/W in Excavation (B.M.S.)	51,954.87 m ³
10.2 E/W in Excavation (Hard Rock)	48,612.60 m ³
10.3 E/W in Drain and Structures (B.M.S.)	11,878.18 m ³
10.4 E/W in Drain and Structures (Hard Rock)	7,008.90 m ³

11. Project Cost

11.1 Grand Total NRs.	393,211,969.82	(Including 13% VAT)
11.2 Cost per KM NRs.	65,535,328.30	(Including VAT)

Table of Contents

1.	BACKGROUND	1
1.1	INTRODUCTION.....	1
1.2	OBJECTIVES OF THE STUDY	2
1.3	SCOPES OF THE STUDY	2
1.4	PROPOSED STUDY AREA	3
1.4.1	<i>Location and Access</i>	<i>3</i>
1.4.2	<i>Geography and Climate</i>	<i>3</i>
1.4.3	<i>Geo-physical</i>	<i>4</i>
1.4.4	<i>Geology</i>	<i>5</i>
1.4.5	<i>Hydrology and Meteorology</i>	<i>6</i>
1.4.6	<i>Demographic Characteristics</i>	<i>6</i>
1.5	WORKING APPROACH AND METHODOLOGY	6
1.5.1	<i>Review of Literature</i>	<i>7</i>
1.5.2	<i>Data Collection</i>	<i>7</i>
1.5.3	<i>Data Processing and Analysis</i>	<i>8</i>
1.5.4	<i>Report Submission</i>	<i>8</i>
2	GEOMETRIC DESIGN STANDARDS	9
2.1	ROAD CLASSIFICATION	9
2.2	TRAFFIC AND LOADING	9
2.3	DESIGN SPEED	10
2.4	HORIZONTAL CURVATURE	10
2.5	MINIMUM RADIUS OF CURVATURE	10
2.6	EXTRA WIDENING.....	10
2.7	WIDENING OF CARRIAGEWAY ON CURVES.....	11
2.8	VERTICAL CURVE.....	11
2.9	SIGHT DISTANCE	11
2.10	SETBACK	12
2.11	ROAD LEVEL.....	12
2.12	RIGHT OF WAY	12
2.13	CARRIAGEWAY	12
2.14	SHOULDER.....	13
2.15	CAMBER	14
2.16	TRAFFIC SIGN POSTS AND SAFETY	14
2.17	ROAD DRAINAGE.....	14
2.18	TRAFFIC MANAGEMENT ELEMENTS	15
2.18.1	<i>Hump for traffic calming</i>	<i>15</i>

2.18.2	<i>Rumble Strips for traffic calming</i>	16
2.18.3	<i>Signs for traffic management</i>	16
2.18.4	<i>Restriction on commercial sign boards</i>	16
2.19	LOCATION OF UTILITIES	16
2.19.1	<i>Water pipes</i>	17
2.19.2	<i>Electrical lines</i>	17
2.19.3	<i>Other cable lines</i>	17
2.19.4	<i>Provision for future utilities</i>	17
2.19.5	<i>Side drain</i>	17
3	ALIGNMENT SURVEY	18
3.1	SURVEY PROCEDURE	18
3.2	ALIGNMENT DESCRIPTION	18
3.3	BENCH MARKS AND OTHER REFERENCE POINTS	18
4	DESIGN	19
4.1	HORIZONTAL ALIGNMENT	19
4.2	VERTICAL ALIGNMENT	19
4.2.1	<i>Summit curve</i>	19
4.2.2	<i>Valley curve</i>	20
4.3	CROSS-SECTION DESIGN	20
4.4	DRAINAGE	21
4.4.1	<i>Longitudinal drainage</i>	21
4.4.2	<i>Cross drainage:</i>	21
4.5	RETAINING STRUCTURES	22
4.6	ROAD SIDE DEVELOPMENT	22
5	PROJECT COST	24
5.1	QUANTITY CALCULATION	24
5.2	RATE ANALYSIS	24
5.3	COST CALCULATION	24
6	REFERENCES	25

GEOLOGICAL AND GEOTECHNICAL EVALUATION

1. Background

1.1 Introduction

Nepal is an Argo based country; the rise and fall of agricultural production directly affect the economic status of country. Nepal's lands are hilly and mountainous, where productivity is either less or there is no means of transportation to facilitate the linkage of farmlands to the market centers, or to nearby strategic road heads. As the Ninth Five Year Plan has the prime objective of poverty alleviation and is drawn up in a line with Agriculture Perspective Plan (APP) and anticipated to generate substantial opportunities for Feeder employment through diversification, commercialization and industrialization of the agriculture sector. To achieve this target it is necessary to make assurance of availability of means and resource for improved agricultural practice and easy access to market opportunities for agricultural products and basic human services. In connection with the agriculture development, two sectors have prime importance, viz. road and irrigation sector. Absence of proper irrigation facility, productivity will not reach the desired level, and without the connection of transportation of farm land to market center or to nearby strategic road head, the price of production will be high. Consequently, the development of agriculture remains only a dream, if this two-sub sector is sidelined. At present, the Feeder road network has not much significant economic impact on the development of agriculture sector as it has very low density, 6 km per 100 km square throughout the kingdom. To enhance the growth of agriculture sector, Feeder road network has given much preference and Ninth Five Year Plan and Agriculture Perspective Plan estimate it to increase the density up to 11 km per 100 km square.

Across its relatively shorter north south width, Nepal offers diversity in every aspect. Due its locking between extreme topographic features—the Himalayas and Terai, the topography offers a fragile nature with countless hills, highlands, and mountains and gorges. Himalayas offer a relatively newer geological formation, which is easily prone to erosions due to its loose binding nature. Because the topography falls from the highest point in the world to a few hundred meter above the mean sea level within relatively short distance the slope of the territory is intense. This is why there exists an extended network of snow fed rivers originating from Himalayas rapidly flow down the Terai. The topography alone is not matter of comparison for diversity. The people of various caste groups with various cultural and social statuses also inhabit the kingdom. The land, on the other hand is of several category, for example, fertile in plains to barren in the mountainous, and average in between hilly regions. There exists variation in several aspects of the social status through east west but it is more intensive through north south. Such a variation in productivity, culture, and other factors among different areas of the country and different ethnic groups of the same area necessitates the transportation network throughout the nation. Due to fragile topography and extended networks of Torrent Rivers throughout the country transportation facilities have been one of the nightmarish task for both government as well as the private sectors. The problem is more acute in the hilly and mountainous regions. Transportation network is therefore one of the most important infrastructural elements for Feeder and mountainous regions for cultural and economic exchanges to the rest of the parts of nation. Although a major portion of the national budget goes to the transportation segment annually but it always seems to be deficit.

Obviously, the road is one of the most important components of the transportation network since it offers the effective alternative of the transportation of people as well as goods. It is safer, economic in several conditions. Road network is the most widely reached component of the national transportation network. Hence it is very important for a nation to extend the road network as wide as possible for smoothness of infrastructure development program in latter stages.

1.2 Objectives of the Study

The overall objective of the consulting service providing firm will be to conduct a Detailed Engineering Survey of the proposed road alignment, prepare the Detailed Design and Cost Estimate for the construction of the road.

The specific objectives of the study are:

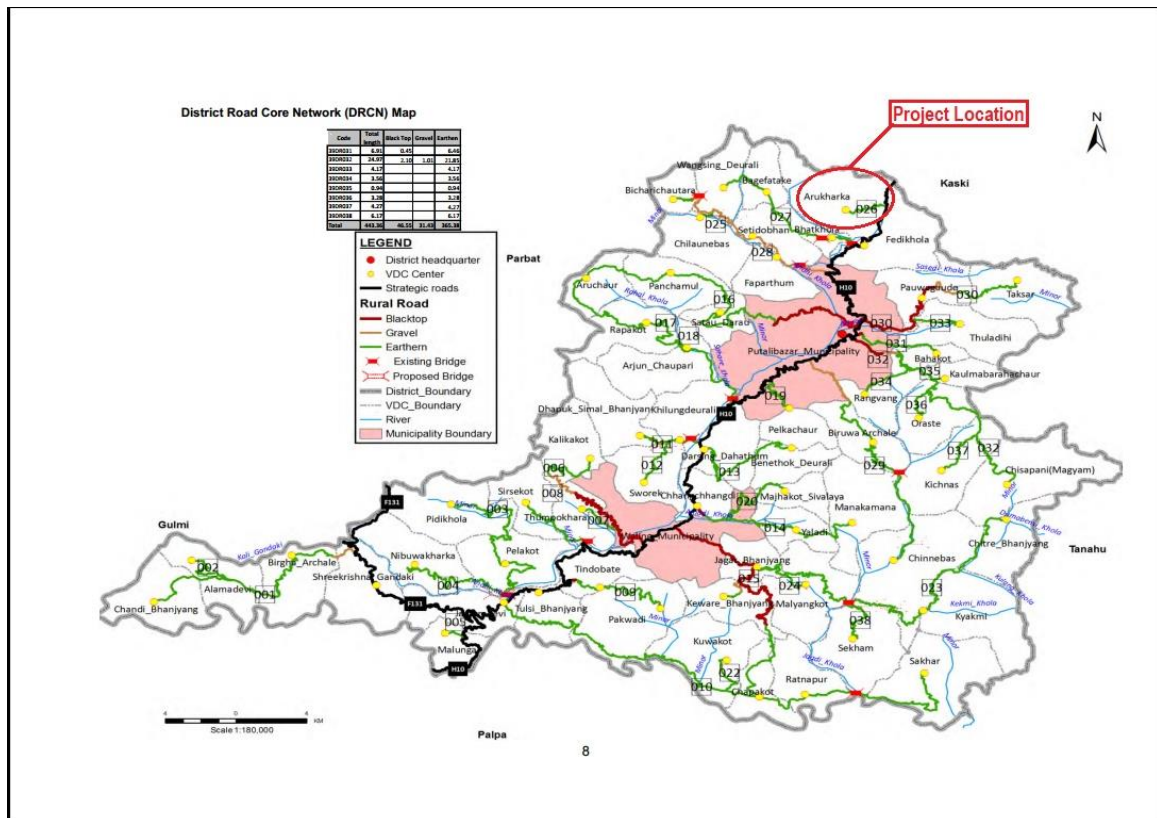
- Conduct detailed field survey of the road/section;
- Design the road and its structure with drawing as per the standard;
- Prepare the estimation of the works as per the norms and existing rates; and
- Prepare the drawings and report in standard format.

1.3 Scopes of the Study

Following works will be executed as the part of detail survey and design of the road:

1. Reviewing the reports of the alignment survey & choose the economically feasible alignment within the study corridor.
2. Conduct a Detail engineering survey of the alignment including the right of way strip of the proposed road corridor.
3. Establishment of Bench Marks (BMs) and other reference points in the field.
4. Taking the longitudinal and cross section at appropriate interval confirming to get the maximum possible profile of the road corridor.
5. Prepare cost estimate with analysis of the rates.
6. Preparation of BOQ
7. Prepare final reports of survey and design.

1.4 Proposed Study Area



1.4.1 Location and Access

The proposed study consists of roads in Phedikhola Rural Municipality of Syangja District. The road section begins at Sarketari (28°10'30.40"N, 83°53'35.35"E). After the construction of these road networks it will enhance the accessibility within the Municipality and will be a major factor for the development of connected settlements and the district because of connection with the Siddhartha Highway. In this package of the road, the total length is of 6000 m.

1.4.2 Geography and Climate

The district has different geographical climatic variation from Upper Tropical to Subtropical. The lowest elevation point is Keladighat at 366 meters above mean sea level and the Panchase lek is highest elevation point i.e. 2512 meters above mean sea level. Elevation of District Headquarters of Syangja, Putalibazar is 850 meters. Syangja is located in the region of Nepal covering an area of 1,164 km². This district is situated in Gandaki zone of Mid-Western Development Region, 270 km far from the capital Kathmandu. It borders with Tanahu district to the East, Gulmi and Palpa districts to the West, Parbat and Kaski districts to the North and Palpa district to the South.

Table 1: Climate zone and their respective elevation range and area covered

Climate Zone	Elevation Range	% of Area
Upper Tropical	300 to 1,000 meters	53.6 %
Subtropical	1,000 to 2,000 meters	45.3 %

1.4.3 Geo-physical

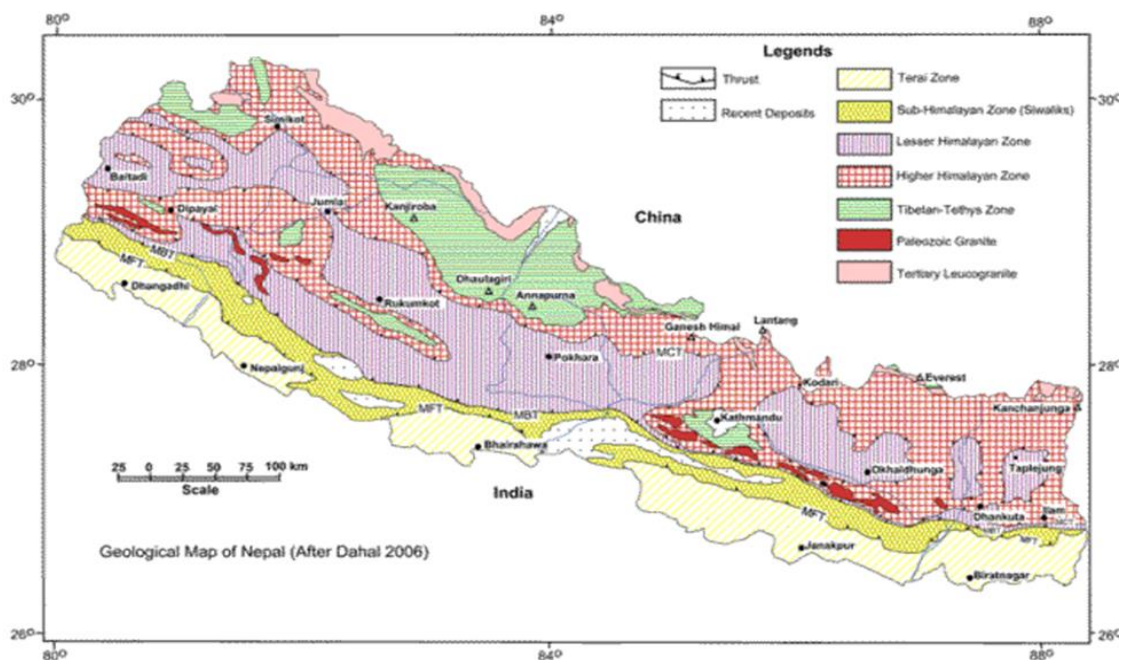
The site is located mostly in the Seti formation, (Geo code: 026, FID: 203) and some part lies in the Nuadanda formation (Geo Code: 027, FID: 327). The identification of the slope zone can be done using the table below:

ZONE	LAND UNIT	DESCRIPTION
1. Snow Peaks		Snow Peaks.
2. Zone of Glaciers		Slopes with glaciers and moraines.
3. Degraded Middle Slopes (less than 35 degrees)	3A	Ancient Erosional Terrace. Covered with in-situ weathered profile of soil up to 3 m thick. Slope angle generally less than 35 degrees. Relatively stable. Often farmer terraced. Surface water erosion high.
	3B (4D)	Degraded Colluvium. Transported slope debris or landslide debris comprising gravel, cobbles, and boulders bound in silt/clay matrix. Slope angle less than 35 degrees. Relatively stable. Often farmer terraced. Variable permeability.
4. Active Lower Slopes (more than 35 degrees)	4A	Bare Rock Slopes. Steep slopes angle often more than 60 degrees. Stability dependent on orientation of discontinuities (bedding/joints)
	4B	Rock Slopes with Shallow (less than 2 m) Loose Debris Cover. Slope angle 45 degrees - 60 degrees. Shallow instability and debris slides. Mass instability as 4A.
	4C	Active Colluvium. Thick landslide debris often with toe being eroded seasonally by river. Slope angle more than 35 degrees. Actively degrading, highly unstable.
	4D(3B)	Degraded Colluvium. See 3B but less stable.

5. Recent Side Terraces and Valley Floor (less than 20 degrees)	5A	Higher Terraces. Oldest terraces often heavily dissected by drainage gullies. Thick weathering profile up to 3 m. Slope angle generally 0 degrees to 20 degrees. Generally stable but can be highly erosive if surface residual soil cover is penetrated.
	5B	Terrace Scarp Faces. Steep, often sub-vertical. Actively degrading usually as sudden slumps. Highly erosive forming cones of loose debris.
	5C	Low Terraces. Usually above normal flood levels, but susceptible to periodic high floods. Soil cover is generally less than 30 cm. Highly permeable and erosive. Slope angle 0 degrees - 10 degrees.
	5D	Flood Plain. Gravel/Cobble banks, highly mobile and covered by annual flood levels. No established soil cover. Highly permeable and erosive.

1.4.4 Geology

The topography of the district is almost same as other hilly districts. It lies on the lesser Himalaya. The site is bounded to the north by the Main Central Thrust (MCT) and to the south by Main Boundary Thrust (MBT) and mainly have unfossiliferous, sedimentary, and metasedimentary rocks such as slate, phyllite, schist, quartzite, limestone, dolomite, etc, ranging in age from Precambrian to Eocene. There are also some granitic intrusions in this zone. The elevation begins from Keladighat at 366 meters to highest point of Panchase lek (2512 m.). Total area of the district is 1164 sq.km. The land use pattern is 27.22% of area covered by forest, 43.32% area covered by cultivated land, 19.19% area covered by non-cultivated land, 8.81% covered by pasture land and remaining 1.5% area covered by others.



Geological Map of Nepal

1.4.5 Hydrology and Meteorology

The climate of the district varies as per the topographical setting and altitude. This district is situated in the province no.4 of Nepal. The climatic data of this district is given below.

Latitude : 27°53'N
Longitude : 83° 49'E
Elevation : 460 m
Location : Chapkot, Syangja District

Air Temperature °C					Relative Humidity %		Precipitation mm		No. of Rainy Days
Mean			Absolute extreme		Observed at				
Max.	Min.	Daily	Max. & Date	Min. & Date	08:45 NST	17:45 NST	Total	Max in 24 hrs. & Date	1:00
26.6	15.6	21.1	38.4/Jul	4/Jan	90	77	3498	257/Jul	134

Source: (Dept. of Hydrology & Meteorology)2010

Monthly Rainfall in mm (2010)

Jan	Feb	Mar	April	May	Jun	July	Aug	Sep	Oct	Nov	Dec
0	0	16.3	12.4	268.8	555.5	649.2	1040.8	128.7	295.3	0	0

1.4.6 Demographic Characteristics

According to the National Census 2011, the total population of the district are 289,148 comprising 63,315 female (56.5%) and 125,833 male (43.5%) residing in 68,881 households. The gender ratio of the district is 77 (77 male to 100 female) and an average population density of around 248 people per square km. The average family size is 4.2. The average literacy rate is about 76.6% whereas 69.5% female and 86.05% male are literate. Syangja district has a multi ethnic composition with Brahman, Magar, Chhetri, Gurung, Kami, Sarki, Damai, Newar, Thakuri, Bhujel and others. The common language using for communication is Nepali and other languages are Magar, Gurung, Newar, Urdu and Bhujel.

1.5 Working Approach and Methodology

The proposed study is mainly related to conduct detailed physical survey, design, cost estimation, and submission of report of the proposed road sector. As such, a team of multidisciplinary research was involved for carrying out desk as well as field work.

The proposed team was consisting of:

<u>S.N.</u>	<u>Proposed Position</u>
--------------------	---------------------------------

- | | |
|----|--------------------------------|
| 1. | Highway/ Transport Engineering |
| 2. | Civil Engineer |
| 3. | Sr. Surveyor/ Overseer |
| 4. | Surveyors |

In a multidisciplinary team, the coordination in the process of working plays a vital role in the success of the study. Therefore, a team leader with highway engineering background of high moral was assigned after the award of the job.

The team leader coordinated and supervised the works of several aspects. From beginning to end of the project the Team Leader had worked with the different expert by guiding, coordinating, and identifying the problems and discussed possible measures to abate or eliminate such existing problems or perceived threat.

The study objectives encompassed mainly four stages of the work.

- a) Review of literature
- b) Data collection
- c) Data processing and analysis
- d) Report submission

1.5.1 Review of Literature

The consultant team members gathered as much as information from written materials, reports, studies of the proposed road/sections and road norms, which were particularly knowledgeable about the specified study.

The Consultant made full use of existing data such as:

- Nepal Rural Road Standard 2069
- Nepal Road Statistics 2002
- Nepal Road Standard 2070
- Nepal Urban Road Standard 2071
- Guidelines of SNRTP road design
- Approach Manual
- Any existing reports, maps, or drawings of the project area.

1.5.2 Data Collection

The consultant team moved to the field for collection of primary data.

The collected primary data broadly includes but not limited to the followings:

- Vertical Control Data (Levels);
- Horizontal Control Data (Distance and Angles);

-
- Soil information along the alignment;
 - Establishment of Bench Marks;
 - Chainage establishment along the alignment;
 - Settlement information along the alignment;
 - Cross drainage data; and
 - Construction material availability survey etc.

1.5.3 Data Processing and Analysis

With the help of data collected analyses were done as per the objective and scope of the study. In the light of processed data, required drawings, cost estimation and reports were produced.

1.5.4 Report Submission

Final Reporting

After conducting the field survey, detail design, drawing and report is prepared. This report (Final Report), is submitted to the Phedikhola Rural Municipality, Syangja for its review and comments on the design, and calculations as well as other facts.

The Final Report consists of the following:

- i. Salient Features of the study;
- ii. Detail Reports
- iii. Detail Bill of Quantities;
- iv. Project Cost;
- v. Rate Analysis;
- vi. L & X section of road alignment
- vii. Standard drawings of slab culvert, pipe culvert, retaining walls, breast walls, Dry Walls, lined side drains, typical road sections (in cutting, filling and partial cut/fill), passing zones & hairpin bends (if provided).

2 GEOMETRIC DESIGN STANDARDS

2.1 Road Classification

According to Nepal Road Standard NRs - 2070 roads in our country shall be classified as follows:

1. National Highway
2. Feeder Roads
3. District Roads
4. Urban Roads

Furthermore, according to Nepal Urban Roads Standard 2071, Urban Roads are categorized into the following broad classification:

- A. Path
- B. Sadak
- C. Marg
- D. Galli
- E. Padyatru Kshetra
- F. Cycle Lane

For assigning various geometric and technical parameters for design, roads are categorized into classes as follows:

1. Class –I
2. Class II
3. Class III
4. Class IV

Approximate Correlation between administrative and functional classification

	Mountainous and steep terrain	Plain and Rolling terrain
National Highway	I,II	II,III
Feeder Roads	II,III	III,IV

2.2 Traffic and Loading

The composition of traffic and the respective traffic coefficients are given below. These coefficients shall be followed during the designing process. (Applicable only for Feeder Road Class 'A' and 'B').

Type of Traffic	Transport Unit (TU)
Cars, light vans, jeeps and pick-ups	1.0
Light trucks up to 2.5 tones gross	1.5
Trucks up to 10 tones gross	3.0
Trucks up to 15 tones gross	4.0
4W Tractor towed trailers – standard	3.0
2W Tractor towed trailers – standard	1.5
Buses up to 40 passengers	3.0

Buses over 40 passengers	4.0
Bicycles	0.5
Rickshaws and tricycles carrying goods	1.0
Carts pulled/pushed by the human beings	2.0
Bullock carts with pneumatic tire wheels	6.0
Bullock carts with wooden wheels	8.0
Mule carts or horse drawn carts	6.0
Pack animals and mules	2.0
Pedestrians walking on the link	0.2
Porters walking on the link	0.4

As per the design standard the transport unit has been taken 200 vehicles per day in two directions.

2.3 Design Speed

Overall geometric design of a road is a function of design speed. Design speed is decided based on the importance of the road (road class) and the type of terrain. Different design speed is to be adopted for various classes of roads. These roads are urban roads categories and for the rolling terrains, design speed of 60 kmph is adopted. In urban roads, cruising speed is a function of safety instead of road geometry and surface condition.

2.4 Horizontal Curvature

When center line of the road deviates from its position, the horizontal curve should be introduced to counteract the safe and smooth movement of vehicles.

Table: Minimum Radius for Horizontal Curve

Design Speed km/hr	Recommended Minimum Radius, m	
	Super elevation e = 10%	Super elevation e = 7%
15	10	
20	12.5	
25	20	
30		30
40		60
50		90
60	110	

2.5 Minimum Radius of Curvature

The minimum radius adopted is 15 m. as per the design standard.

2.6 Extra widening

The widening of road on horizontal curves is provided 10° percent the off tracking of the road. The widening of curves is given as follows for a single-track road.

Table: Recommended Minimum Widening for Single Lane Road

Radius of Curve, m			
	Up to 20	21-60	Above 60
Increase in width (for 3m carriageway)	1.5	0.6	Nil
Increase in width (for 3.75 m carriageway). (m)	0.6	1.5	0.75n

2.7 Widening of carriageway on curves

At horizontal curves, it is necessary to widen the carriageway to provide for safe passage of vehicles. In addition to the conventional mechanical widening to compensate tracking of the rear wheels and psychological effect of narrowing road, additional widening is required to prevent hitting due to long rear overhang of the buses and trucks.

The NRS may be referred to determine the minimum width of such extra-widening and ways to introduce it.

2.8 Vertical Curve

The vertical curves are provided to give the smooth movement of vehicle at the point where the gradient changes abruptly. The design of vertical curves is done considering the sight distance available. The criterion to be adopted is that the minimum sight distance shall be equal to the stopping sight distance laid down.

Summit curves in urban areas should be designed for safe stopping sight distance and they should be coordinated with horizontal curvature. Valley curves on unlit urban roads should be such that for night travel the headlight beam distance is the same as the SSD.

The NRS may be referred for type of vertical curve, way to introduce them and to determine the minimum length of curve in relation to SSD.

2.9 Sight Distance

The stopping sight distance is the clear distance needed by a driver to bring his vehicle to stop before collision. This is calculated as the sum of braking distance required by the vehicle during perception and brake reaction time.

Speed, km/hr	Perception and Brake Reaction Time, t (sec)	Coefficient of Longitudinal Friction	Safe Stopping Sight Distance, m
15	2.5	0.4	15
20	2.5	0.40	20

25	2.5	0.40	25
30	2.5	0.40	30
40	2.5	0.38	45
50	2.5	0.37	60
60	2.5	0.36	80

2.10 Setback

In order to provide the drivers adequate stopping sight distance, it needs to be ensured that any physical objects on the inside of horizontal curves do not restrict it. The obstruction includes trees and poles as well. The NRS may be referred to calculate the set-back.

2.11 Road level

The practice of adding layers upon layers of pavement periodically over the old surface shall be discontinued. The level of pavement, sidewalk and verges once fixed shall remain the same for a minimum of 50 years.

2.12 Right of Way

Right of way depends on the importance of a road and possible future development. Recommended total right of way (RoW) and Building line for different types of road are given below:

	Total right of way (RoW) (m)	Setback distance from Road land boundary / (RoW) to Building line on either side (m)	Comment
District Road (Core Network)	20	6	10 m RoW on either side from road center line
Village Road	15	3	7.5 m Row on either side from road center line

If in any case the existing Right of Way is more than above defined value, existing available width shall be adopted as a right of way

2.13 Carriageway

The width of the carriageway depends on: The dimensions of vehicles using the road, Speed of travel, Traffic volume, Width of shoulder

For district road (core network) with low volume of traffic (< 100 vpd), single lane operation is adequate as there will be only a small probability of vehicles meeting. The low number of passing

maneuvers can be undertaken at reduced speeds using either passing place (in Hill) and shoulders (in Terai), providing sight distance are adequate for safe stopping. These maneuvers can be performed without hazards and overall loss in efficiency brought about by the reduced speeds will be small as only a few such maneuvers will be involved. It is not cost effective to widen the running surface in such circumstances and a basic width of 3.0 m will normally suffice.

Carriage way width of District Road (core network) is 3.75 m but can be reduced to 3 m where traffic volume is less than 100 motorized vehicles per day and where the traffic is not likely to increase.

If a village road carries a traffic volume of more than 100 motorized vehicles per day, the carriageway width will be 3.75 m and affect other design parameters accordingly.

In the case of built up/market area, extra width of pavement for pedestrians and lay-bys can be considered with covered drains, which will be sufficient for parking other motorized and non-motorized vehicles.

For district roads (core network) with a volume of traffic > 400 vpd, single lane width may not be adequate for operation, therefore, should go for higher lane width of 5.5 m. Desirable road surface for District Road (Core Network) is gravel or paved, whereas, for Village road is unpaved or gravel.

Standard recommended carriageway width of the road is depicted in Table below.

Table- Carriageway, Shoulder, and Roadway width.

		Carriageway Width (m)	Shoulder width (m)	Roadway width (m)
District Road (core network)	Hill	5.5 (if traffic > 400 vpd)	0.75	7.0
		3.75 (if traffic > 100 vpd)	0.75	5.25
		3 (if traffic < 100 vpd)	0.75	4.5
	Terai	5.5 (if traffic > 400 vpd)	1.0	7.5
		3.75 (if traffic > 100 vpd)	1.5	6.75
		3 (if traffic < 100 vpd)	1.5	6
Village Road	Hill	3	0.5	4
	Terai	3	0.75	4.5

In case of Urban Roads, on two-way undivided carriageway, the capacity is relatively independent of distribution by direction, and design is based on two-way total flows. On divided carriageway, capacity is dependent on distribution by direction and design should therefore be based on peak hour flow in the busier direction of travel. The design not be based on AADT but on peak hour demands to get Class C level of service. 5.5 m and 6.0 m wide pavements do not allow stable flow even on one way.

2.14 Shoulder

Shoulder width is measured from the edge of the carriageway to the edge of the usable

formation. Shoulders are not a part of urban roads. However, where there is negligible pedestrian traffic or where Shoulders are not a part of urban roads. However, where there is negligible pedestrian traffic or where from drainage considerations no raised sidewalk could be provided, shoulders are required between carriageway and property line to accommodate electric poles, traffic signs, underground service, appropriate clearance to ensure proper vehicle placement and development of full carriageway capacity.

2.15 Camber

Recommended camber cross slope on straight road sections is given in Table below.

Table: Recommended camber cross slope

Camber		District Road (Core Network)		Village Road	
		Hill	Terai	Hill	Terai
Carriageway cross slope (%)	Earthen(existing)	5	5	5	5
	Gravel	4	4	4	4
	Bituminous Seal Coat	3	3	-	-

The minimum acceptable value of cross fall should be related to carrying surface water away from the pavement in an effective manner. Considering possible changes in rainfall patterns due to the climate change, cross slopes are 0.5 to 1 per cent steeper than that required where annual rainfall is less than 1000 mm.

Shoulders having the same surface as the carriageway should have the same cross slope. Unpaved shoulders on paved carriageway should be at least 0.5 per cent steeper than the cross fall of the carriageway. However, 1 per cent more slope than the carriageway is desirable.

2.16 Traffic Sign Posts and Safety

The standard designs for Kilometer and 5-kilometer posts issued separately by the Department of Roads shall be followed on all roads. The standard designs for traffic signs issued separately by the Department of Roads shall be followed on all roads.

2.17 Road Drainage

a. For long life of pavement and other components of a highway system, the sub-grade should be kept at optimum moisture level and avoided to be over wetted.

b. Water should be drained away from the road and ground surface as well as under the surface by a system of surface and subsurface drainage.

Surface Drainage

a. Water is drained from the road surface with adequate camber of both the carriageway and the shoulder.

b. Road side drains are provided in all cut sections to remove water in the longitudinal direction.

- c. Toe-of-slope road side drains are constructed in low fill (<0.8m filling height) sections to convey water away to water courses
- d. Intercepting or catch water drains are placed on back of the top of cut slopes to intercept surface water. Distance of these drains from the edge of the cutting should not be less than 5m.
- e. Flumes are provided to carry collected water down deep cuts or high fill slopes.
- f. Drains should be provided with minimum 0.5% longitudinal grade.
- g. Trapezoidal shape of drains is preferred.
- h. For calculating design discharge on roadside drains following return periods should be taken.

Table: Return periods for calculating design discharges

Road Class	II and III	III	IV
Return Periods in Years	50	33	25

- i. Outlets from the side drains should be provided at no more than 500m intervals.
- j. Sides and bottoms of the drains should be lined according to the longitudinal slope of the drain as shown in Table 13-3. Size of the drain should be worked out based on the discharge, longitudinal slope and type of lining.

Types of Lining	Longitudinal Slopes, %	
	Sandy Soil	Clayey Soil
No lining required	<1	<2
Grass turfing	1-3	2-3
Stone Rip Rap, Masonry, Concrete	3-5	3-5
Stepping	>5	.5

2.18 Traffic Management Elements

2.18.1 Hump for traffic calming

A speed hump is a raised area across the roadway pavement. For a height of 100 mm, the width is about 4.0 m, that is, the gradient is limited to 5%. This can reduce the speed of a cruising vehicle by 20 kmph and help bring it to safe range. Any increase in height and decrease in width can result severe discomfort to the passenger, damage the vehicle and cause loud noise.

Speed humps are recommended only on streets where the speed limit is up to 50 kmph (roads in Sadak, Marg and Galli category) and are not considered appropriate where the 85th percentile speed is more than 70 kmph (i.e, Path category).

2.18.2 Rumble Strips for traffic calming

Strips of height 25 mm to 50 mm and width up to twice the height, cause a tactile vibration and audible rumbling transmitted through the wheels into the vehicle interior. The applications are as follows:

- Along the direction of travel following an edge line or centerline, to alert drivers when they drift from their lane. Gaps need to be made in the strip to ease surface runoff.
- Across the direction of travel, to warn drivers of a stop or slow down ahead, or of an approaching danger spot. Seven strips at 50 m, 35 m, 25 m, 16 m, 9 m, 4 m and 1 m towards the direction of the warning needs to be laid.

As the effect of the rumbles is more pronounced with higher speed, the strips are recommended for roads of Path category and straight sections of Sadak category in the urban area.

2.18.3 Signs for traffic management

TSM has defined three categories of traffic signs. Due to cost and space considerations the priority should be in the order: Regulatory > Information > Warning. Except for the following details, TSM shall be followed.

- Except for "on approaches to junction (C24)", and for road works, signs shall be installed with the bottom at a height of 2.0 m from the road edge. The height of the signs plate shall be 450 mm;
- On approaches to junction (C24) sign shall be installed with the bottom of the sign at a height of 5.5 m from the road edge. The size of the sign plate is determined by the text on it.
- The temporary signs for road works shall be erected with the bottom of the sign at a height of 300 mm from the ground level.

2.18.4 Restriction on commercial sign boards

For easy reading of the signs and signals, no other signs and advertisement boards, on the existing structure or separately, shall be allowed in the following area:

- From 1.5 m to 3.0 m from the road edge
- From 5.0 m to 7.0 m from the road edge

2.19 Location of Utilities

The utilities should fulfill the following condition:

- At depth from 0.5 m to 2.0 m for its own safety and to avoid heavy relocation costs later on;
- At a minimum height of 5.0 m to allow safe movement of emergency vehicles
- Underground utilities not located under road pavement to avoid traffic detour during servicing and for safety concerns

-
- Minimization of poles and use of underground duct for aesthetics

2.19.1 Water pipes

The water mains shall be at 1.0 m depth below the walkway or the median strip. The house connection could be at 0.5 m depth.

2.19.2 Electrical lines

The overhead electrical lines shall be at least 5.5 m above the road pavement when along the road and 6.0 m above at road crossings with the poles at the inner edge of the walkways or on the median strip. The underground electric cable should be at least 2.0 m from the building line and at 1.5 m depth under the walkways or the median strip.

2.19.3 Other cable lines

The overhead cables other than that for electricity (telephone, data, TV, etc) shall be at least 5.0 m above the pavement level when along the road and 5.5 m above at road crossings on the same poles as that for electricity. The poles shall be erected at the inner edge of the walkways or on the median strip. The underground cable ducts should be 1.0 m from the building line and at 1.0 m depth under the walkways or the median strip.

2.19.4 Provision for future utilities

Class III concrete pipes shall be laid under the roads of Path and Sadak category at Path-Path, Path-Sadak and Path-Marg intersections for future utilities without disturbing the road surface. Separate pipes shall be required for electric cable, other cables and water mains.

2.19.5 Side drain

Side drains along the pavement edge shall be "tick" shaped. The collector drains under the walkways could either be of concrete pipes or covered U channel.

3 ALIGNMENT SURVEY

3.1 Survey Procedure

Before the detail survey on the proposed road, the survey team made a reconnaissance survey at the site before pegging the center line.

Upon completion of pegging the center line a traverse (base line traverse) was run along the road corridor. The base line was so set up that the center line of the road would coincide with the traverse line. It was done for the sake of efficiency as the final location survey including curve lying had also to be completed at the same stage by designing, selecting appropriate curves in the field within the very limited time frame.

The base line system of the road has not been connected to the national grid system because the survey was done for a short stretch. So, a classical check of linear angular control was done by measuring the line twice with the tape and staid reading as well, whereas angular control by measuring the angle by both faces of circle and bearing. The difference was adjusted to get the coordinates of the base line.

For vertical control, bench marks were marked on permanent structures at approximately 500m. Interval along the base line and leveling was controlled by back and forth leveling, limiting the error within the permissible value. Then the center line leveling was carried out using elevation of the adjacent bench marks, which was again checked by back and forth leveling procedure. Cross-section leveling was accomplished in conjunction with center line leveling using intermediate sight system. The distance was measured by tape along the center line of the road alignment and cross-section as well.

3.2 Alignment Description

All the roads lie in the Phedikhola Rural Municipality of the Syangja District. The roads are existing District roads that need to be reconstructed and extended. Some of the roads are intersects each other and some don't. The designed roads are road of small stretch.

3.3 Bench Marks and Other Reference Points

Bench marks are placed at every 500m. Bench marks of concrete post 15cmx15cmx60cm with a bolt or nail flushed with concrete on the top and installed nearby right of way having 15cm projection above ground. Wherever permanent structures, big boulder or big tree is available, reference of the bench mark or I.P with available permanent points has been taken.

4 DESIGN

4.1 Horizontal Alignment

For the design of road elements, as mentioned earlier, design standards for Class A District roads have been adopted. The design principles of several road elements are discussed below.

Horizontal alignment is designed for the stopping distance criteria and the comforts of passengers while the vehicle traveling at the design speed turn in the curve.

Center line of proposed road was determined within the survey strip during the field survey itself. Minor rectification was possible at the office during design period. For the horizontal survey elements following computation procedure were adopted.

At any Instrument Station (IP), with measured deflection angle (Δ) in degrees, and estimated radius (R) in meters, assuming the curve to be provided is simple circular curve, the horizontal curve elements are given by;

Length of curve, $L = \pi * R * \Delta / 180$, meters

Tangent length, $T = R * \tan (\Delta / 2)$, meters

Shift of MC from IPE= $R * \{\sec (\Delta / 2) - 1\}$, meters

Ch of beginning of the curve (BC) = Ch of IP - T

Ch of middle of the curve (MC) = Ch of BC + L/2

Ch of end of the curve (EC) = Ch of MC + L/2 = Ch of BC + L

As per the Terms of Reference (ToR) the cross sections were taken at each chainage points set at every 20 m distance and at the MC points.

Due attention was exercised to provide the stopping distance throughout the stretch during the execution of the project.

4.2 Vertical alignment

All vertical curves were designed as simple parabola. The criteria to design the vertical alignment are the minimum sight distance and headlight sight distance whether the curve is valley of summit curves.

4.2.1 Summit curve

The criteria of design of summit curves is that the minimum sight distance shall be equal to the stopping distance (20 m for this case)

The length of summit curve is calculated by:

$L = A * S^2 / 200$ when $S < L$

$L = 2 * S - 200 / A$ when $S > L$

Where A = algebraic difference of the approaching gradients, %
 $= n_1 - n_2$ (where n_1, n_2 are approach grades with proper sign: up/down wards +/-)
 S = sight distance, meters

The above formula is based on the assumption that

Height of the eye = 1.0m
 Height of lowest visible object = 0.1m

$L = 4.5 \cdot A$ when $S < L$
 $L = 60 \cdot 200/A$ when $S > L$

4.2.2 Valley curve

The criteria of design of valley curves is that the headlight sight distance shall be equal to the stopping distance (20 m for this case)

The length of valley curve is calculated by:

$L = A \cdot S^2 / (500 + 3.5 \cdot S)$ when $S < L$
 $L = 2 \cdot S - (500 + 3.5 \cdot S) / A$ when $S > L$

Where A = algebraic difference of the approaching gradients, %
 $= n_1 - n_2$ (where n_1, n_2 are approach grades with proper sign: up/down wards +/-)
 S = headlight sight distance, meters

$L = 1.49 \cdot A$ when $S < L$
 $L = 60 \cdot 605/A$ when $S > L$

Chainages of:

Beginning of vertical curve (BVC) = Ch of IP - $L/2$
 Middle of vertical curve (MVC) = Ch of IP
 End of vertical curve (EVC) = Ch of IP + $L/2$

Elevations of:

Beginning of vertical curve (BVC) = Elevation of Apex Pt. - $n_1/100 \cdot L/2$
 End of vertical curve (EVC) = Ch of Apex Pt. + $n_2/100 \cdot L/2$
 Line of BVC & EVC just below IP (M'VC) = (Elevation of BC + Elevation of EC)/2
 Middle of vertical curve (MVC) = (Elevation of IP + Elevation of M'VC)/2

4.3 Cross-section design

The cross section was designed for Class A District road of total formation width of 6 m is adopted for this road. 2% camber provided throughout the road. Super elevation is provided as per the following steps:

i) The super elevation for 75% of design speed is calculated neglecting the friction

$$e = V^2/225 R$$

We have: $V = 15 \text{ km/hr}$, For $R = 10 \text{ m.}$, $e = (0.75 \times 15)^2 / 225 \times 10 = 0.05 < 0.07$

- ii) If the calculated value of 'e' is less than 7% or 0.07, the value so obtained is provided. If the value of 'e' exceeds than 0.07, then provide the maximum super elevation to 0.07 and proceed to step (iii)
- iii) Check the coefficient of friction developed for the maximum value of $e = 0.07$ at full value of design speed, $f = (V^2/127 R - 0.07)$
- If the value of 'f' thus calculated is less than 0.15, the super elevation of 0.07 is safe for the design speed.
- We have as per first step:

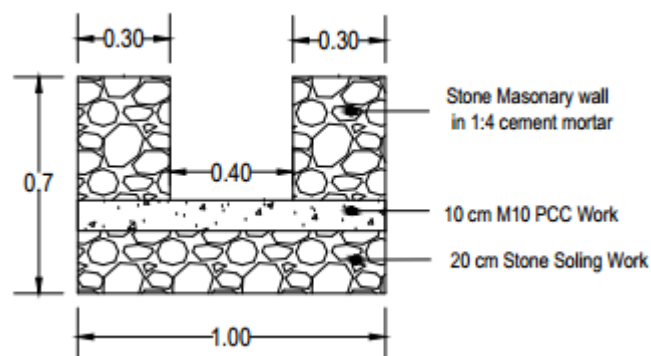
Radius of curve, m	10	20	30	40	50
Super elevation e, m	0.056	0.028	0.018	0.014	0.011

All these value are less than 0.07, so through the road alignment 'e' of value 0.07 is provided.

4.4 Drainage

4.4.1 Longitudinal drainage

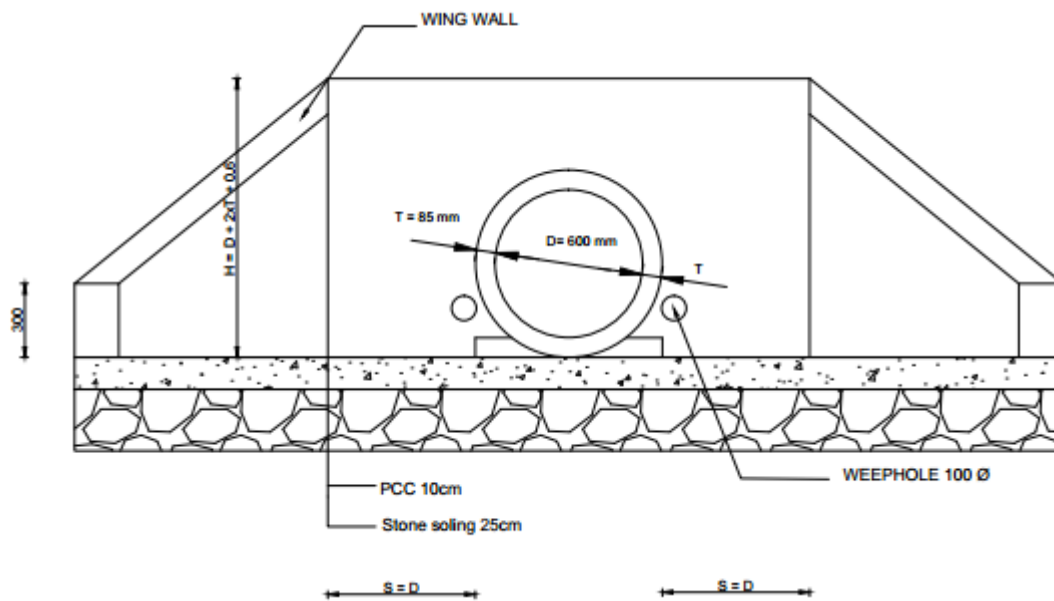
The design criterion is that the base of unlined drain is sufficiently wide to facilitate the cleaning by a shovel. Both side slopes are uniform. The size of the drain varies depending upon the road side conditions.



Typical section of the side drain

4.4.2 Cross drainage:

Depending upon the road site condition, cross drainage structures are adopted. Pipe culverts are mostly adopted as cross drainage structure. In some places causeways are also used.



Elevation of Pipe Culvert

4.5 Retaining structures

Dry rubble masonry retaining structures are provided to support the road side from being slipped. Dry rubble wall are provided up to the retaining height 3m and greater than this gabion retaining structure is provided. The retaining structures will be provided as per the site condition. Three types of retaining structures are provided to support the road side from being slipped, dry rubble wall, gabion wall & masonry wall but here only gabion retaining wall is provided according to site condition.

Gabion Retaining Wall (Ht. \leq 6 m)

Dimensions:

Height of the wall	: H m
Base Width	: $0.65 \times H$
Top Width	: 0.5 m.
Back Slope	: $0.17 \times H$
Base	: Horizontal

4.6 Road side development

At the curves where the road width is narrow, guide posts have to be provided to guide the vehicle. Also the guide posts have to be provided at bridge approach. The traffic sign posts are to be provided on left side of the road to regulate traffic, warn the drivers & for the safety purpose. The sign post & guide post have to be provided as per design standard. The sign posts are to be provide at the following sections of the road & also where necessary.

- Bridge, if any
- Sharp bends

-
- c) Unstable areas like debris fall, rock fall, slide zone.
 - d) Areas of Limited design speed.
 - e) Kilometer posts at every 1 km. & 5 km.
 - f) Crossing & Turning points

The road side development includes plantation of trees & shrubs and providing sign posts required for the road users for safe, efficient & comfortable driving. The sign posts, kilometer post & five kilometer posts have to be provided according to the design standard.

5 PROJECT COST

5.1 Quantity Calculation

The detail quantity calculations are attached in the Annex. The matrix of roadside structures like retaining walls, breast walls, side drains, cross drainage etc. are also presented therewith. The typical sections and working drawings of these structures are included in the Design and Drawings report.

5.2 Rate Analysis

The detail rate analysis sheet is attached in the Annex. The rate analysis is done on the basis of the prevailing district rates of Fiscal Year 2074/075 and the standard norms of Department of Road (DoR). Entire transportation cost by Truck and Tractor and collection of construction materials, leading distances are calculated in detail.

5.3 Cost Calculation

The total project cost for the proposed road alignments including earthwork, construction of retaining structures & cross drainage structure is calculated in detail and attached in the Annex. The cost calculation is based on the quantity calculation and prevailing rate assessed by the consultant for the present study.

6 REFERENCES

1. Nepal Road Standards (2027), First Revision 2045, Revision 2070 - *Department of Roads*.
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3. Analysis of Rates for Construction works 2041 - *Ministry of Works and Transportation*.
4. Standard Designs - *Department of Roads*.
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6. Highway Engineering, 7 the edition - *Khanna and Justo*
7. Nepal Rural Road Standards -2069 - *Department of Roads*.
8. Different Maps - *GN*
9. Standard Design -*Design Section, DoR*
10. Climatologically records of Nepal -*Department of Hydrology & Meteorology*
11. Approach for the Development of Agricultural and Feeder Roads - *DoR*
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13. Technical Specification - *DoR*
14. Demographic Profile of Nepal 2013/2014 – *Mega Publication & research center*

GEOLOGICAL AND GEOTECHNICAL EVALUATION

ANNEX

COST ESTIMATION

Abstract of Cost

FY : 2074/75

S.No.	Description of Items	Unit	Total Quantity	Rate (in Rs.)	Amount (in Rs.)	Remarks
1	General Works					
1.1	Site clearance work in the construction site as per necessary, all complete work.	L.S.	1.00	100,000.00	100,000.00	
1.2	Provide photographic records of site progress work with album in standard size, all complete work.	Months	12.00	2,000.00	24,000.00	
1.3	Provide, erect and maintain project site notice board as specified.	Nos.	2.00	5,000.00	10,000.00	
1.4	Provision for insurance as specified.	L.S.	1.00	200,000.00	200,000.00	
1.5	Provide safety precautions during the construction period erecting red flag, temporary drainage works, temporary fence work, temporary diversion and other works related to safety and health hazard as per instruction of the Engineer.	L.S.	1.00	100,000.00	100,000.00	
1.6	Mobilization and demobilization of the heavy equipments and tools.	L.S.	1.00	100,000.00	100,000.00	
1.7	Laboratory tests ordered outside the project as per instruction.	P.S.	1.00	100,000.00	100,000.00	
1.8	Provisional sum for unforeseen works.	P.S.	1.00	500,000.00	500,000.00	
Sub-total (1)					1,134,000.00	
2	Pavement Works					
2.1	Road way excavation in Hard soil/Gravels/B.M.S.including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	m3	51,954.87	125.77	6,534,520.05	
2.2	Road way excavation in Hard Rock including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	m3	48,612.60	1,528.28	74,293,463.00	
2.3	Formation of embankment including compaction in layers not exceeding 150mm compaction depth, watering and necessary haulage etc. as per specification, all complete work.	m3	14,011.50	451.34	6,323,959.44	
2.4	Providing, laying, spreading, watering, levelling and compaction of natural sand gravel subbase grading as per table 12.1 of standard specifications, all complete work.	m3	7,640.64	1,844.27	14,091,376.39	
2.5	Providing, laying, spreading, watering, levelling and compaction of crusher run aggregate materials for base course as per specifications, all complete work.	m3	3,479.40	3,019.29	10,505,319.36	
2.6	Providing and spraying bituminous Prime coat MC30/MC70 including cleaning the road surface using wire, brushes, broom etc. before applying prime coat.	Ltr	25,515.60	174.78	4,459,540.02	
2.7	Providing and spraying bituminous tack coat MC30/MC70 including cleaning the road surface using wire, brushes, broom etc. before applying tack coat.	Ltr	18,556.80	174.78	3,243,301.83	
2.8	Providing, mixing, laying and compaction of premix carpet, all complete work.	m3	579.90	15,324.52	8,886,689.43	
2.9	Providing and laying sand Seal, all complete work.	m2	23,196.00	117.90	2,734,808.40	
2.1	Providing and placing machine mixed M25/20 cement concrete including compaction, curing and testing all complete as per specification, drawing, all complete works.	m3	2,235.60	16,907.47	37,798,345.52	
2.11	Providing, Preparing and Installing form works including necessary supports and removing after completion, all complete works.	m2	1,565.87	700.93	1,097,566.43	
2.12	Providing and laying Reinforcement (diameter above 8 mm and upto 16 mm) including cutting, bending, binding, fixing in position and lead etc. all complete as per specification and drawing.	MT	124.286	125,062.50	15,543,517.87	
Sub-total (2)					185,512,407.74	
3	Drainage and Structural Works					

S.No.	Description of Items	Unit	Total Quantity	Rate (in Rs.)	Amount (in Rs.)	Remarks
3.1	Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	m3	11,878.18	145.91	1,733,139.30	
3.2	Earthwork excavation in Hard Rock for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	m3	7,008.90	1,689.37	11,840,611.37	
3.3	Earth Backfilling in layers including compaction, watering and lead etc., all complete work.	m3	2,319.19	978.56	2,269,461.92	
3.4	Providing and laying dry stone soling, all complete work.	m3	1,840.00	4,251.17	7,822,153.72	
3.5	Providing and placing machine mixed M15/40 cement concrete including compaction, curing, testing and lead etc. all complete as per specification and drawing.	m3	920.00	12,174.36	11,200,411.20	
3.6	Providing, Preparing and Installing formwork including necessary supports and removing after completion as per specification and drawing, all complete work.	m2	1,877.40	700.93	1,315,927.39	
3.7	Providing and laying Random rubble stone masonry in cement mortar [cement(1) : sand(4)] including scaffolding, curing, preparation of mortar, weep holes if necessary, etc. all complete as per specification, drawing, all complete work.	m3	3,126.60	10,099.59	31,577,370.27	
3.8	Fabrication of hexagonal mesh type 100mm x 120 mm Gabion boxes/ mattresses with diaphragms, with binding wire 12 swg, mesh wire 10 swg and selvaged wire 8 swg, all heavy coated G.I. wire tying down the lid complete and providing and filling stone/boulder in gabion boxes/ mattresses etc as per drawings and specification, all complete work.	m3	12,973.75	4,354.36	56,492,378.05	
3.9	Providing, laying and fixing of Geo-textile (filter fabrics) with necessary lead and lift, all complete work.	m2	5,350.00	206.49	1,104,742.90	
Sub-total (3)					125,356,196.12	
4 Cross-drainage Works						
4.1	Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	m3	1,080.72	145.91	157,687.31	
4.2	Earth Backfilling in layers including compaction, watering and lead etc., all complete work.	m3	196.20	978.56	191,993.07	
4.3	Providing and laying dry stone masonry soling (coursed rubble) including dressing etc., all complete work.	m3	198.00	4,251.17	841,731.75	
4.4	Providing and placing machine mixed M15/40 cement concrete including compaction, curing, testing and lead etc. all complete as per specification and drawing.	m3	79.20	12,174.36	964,209.31	
4.5	Providing and laying Random rubble stone masonry in cement sand mortar [cement(1) : sand(4)] (manual mixing) including scaffolding, curing, preparation of mortar, lead etc., all complete work.	m3	254.52	10,099.59	2,570,547.01	
4.6	Providing, Preparing and Installing form work including necessary supports and removing after completion, all complete work.	m2	178.92	700.93	125,410.52	
4.7	Providing and laying NP3 RCC hume-pipes of diameter 600 mm (internal) with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) , as per drawing and specification all complete work.	Rm	270.00	8,603.84	2,323,036.80	
4.8	Providing, laying and fixing of Geo-textile (filter fabrics) with necessary lead and lift, all complete work.	m2	217.80	206.49	44,974.39	

S.No.	Description of Items	Unit	Total Quantity	Rate (in Rs.)	Amount (in Rs.)	Remarks
4.9	Providing, jointing and laying HDP pipes (110 mm outer diameter) with or without collar etc. complete in place as per specification.	Rm	48.24	745.43	35,959.58	
Sub-total (4)					7,255,549.74	
5 Miscellaneous Works						
5.1	Supplying and applying paint over new bitumen surface for Road marking including cleaning, watering, brooming etc. all complete (10cm. wide strip)	Rm	7,937.50	53.72	426,374.71	
Sub-total (5)					426,374.71	
Total (1+2+3+4+5)					319,684,528.31	
10% Physical Contingencies					31,968,452.83	
13% VAT					41,558,988.68	
Grand Total					393,211,969.82	
Cost per KM					65,535,328.30	

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal

Quantity Estimate

Name of the Road: Sarketari-Aurkharka-Panchase Road (Ch- 0+000 to 7+100)

FY : 2074/75

S.No.	Description of Items	No.	Length (m)	Breadth (m)	Height (m)	Quantity	Unit	Remarks
1 General Works								
1.1	Site clearance work in the construction site as per necessary, all complete work.	1				1.00	L.S.	
1.2	Provide photographic records of site progress work with album in standard size, all complete work.	6				6.00	Months	
1.3	Provide, erect and maintain project site notice board as specified.	2				2.00	Nos.	
1.4	Provision for insurance as specified.	1				1.00	L.S.	
1.5	Provide safety precautions during the construction period erecting red flag, temporary drainage works, temporary fence work, temporary diversion and other works related to safety and health hazard as per instruction of the Engineer.	1				1.00	L.S.	
1.6	Mobilization and demobilization of the heavy equipments and tools.	1				1.00	L.S.	
1.7	Laboratory tests ordered outside the project as per instruction.	1				1.00	P.S.	
1.8	Provisional sum for unforeseen works.	1				1.00	P.S.	
2 Pavement Works								
2.1	Road way excavation in Hard soil/Gravels/B.M.S.including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	Total	including 5% extra for site adjustment			51,954.87	m3	
	Ch: 0+000 to 5+600	1	from design calculation			49,480.83		
2.2	Road way excavation in Hard Rock including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	Total	including 5% extra for site adjustment			48,612.60	m3	
	Ch: 5+600 to 7+100	1	from design calculation			46,297.71		
2.3	Formation of embankment including compaction in layers not exceeding 150mm compaction depth, watering and necessary haulage etc. as per specification, all complete work.	Total	including 5% extra for site adjustment			14,011.50	m3	
	Ch: 0+000 to 5+600	1	from design calculation			10,962.49		
	Ch: 5+600 to 7+100	1	from design calculation			2,381.80		
2.4	Providing, laying, spreading, watering, levelling and compaction of natural sand gravel subbase grading as per table 12.1 of standard specifications, all complete work.	Total				7,640.64	m3	
	Flexible pavement	1	3,866.00	6.00	0.15	3,479.40		
	Rigid pavement	1	2,484.00	6.00	0.20	2,980.80		
	For Extrawidening	1	Area:	5,902.19	0.20	1,180.44		
2.5	Providing, laying, spreading, watering, levelling and compaction of crusher run aggregate materials for base course as per specifications, all complete work.	Total				3,479.40	m3	
	Flexible pavement	1	3,866.00	6.00	0.15	3,479.40		
2.6	Providing and spraying bituminous Prime coat MC30/MC70 including cleaning the road surface using wire, brushes, broom etc. before applying prime coat.	Total				25,515.60	Ltr	
	Application @ 1.1 lit/sq.m- Ch: 0+000 to 4+360	1	3,866.00	6.00	-	25,515.60		
2.7	Providing and spraying bituminous tack coat MC30/MC70 including cleaning the road surface using wire, brushes, broom etc. before applying tack coat.	Total				18,556.80	Ltr	
	Application @ 0.8 lit/sq.m- Ch: 0+000 to 4+360	1	3,866.00	6.00	-	18,556.80		
2.8	Providing, mixing, laying and compaction of premix carpet, all complete work.	Total				579.90	m3	
	Flexible pavement	1	3,866.00	6.00	0.025	579.90		
2.9	Providing and laying sand Seal, all complete work.	Total				23,196.00	m2	
	Flexible pavement	1	3,866.00	6.00	-	23,196.00		

S.No.	Description of Items	No.	Length (m)	Breadth (m)	Height (m)	Quantity	Unit	Remarks
2.10	Providing and placing machine mixed M25/20 cement concrete including compaction, curing and testing all complete as per specification, drawing, all complete works.	Total				2,235.60	m3	
	Rigid pavement	2	2,484.00	3.00	0.15	2,235.60		
2.11	Providing, Preparing and Installing form works including necessary supports and removing after completion, all complete works.	Total	including 5% extra for site adjustment			1,565.87	m2	
	Longitudinal formwork for Rigid pavement	3	2,484.00	-	0.15	1,117.80		
	Transverse formwork @ every 6 meters	415	6.00	-	0.15	373.50		
2.12	Providing and laying Reinforcement (diameter above 8 mm and upto 16 mm) including cutting, bending, binding, fixing in position and lead etc. all complete as per specification and drawing.	Total	including 5% extra for site adjustment			124.286	MT	
	Longitudinal bars for Rigid pavement: 12mm dia @ 250mm c/c	26	2,484.00	unit weight:	0.89	57,479.76		
	Lap for longitudinal bars	6,459	0.36	unit weight:	0.89	2,069.46		
	Transverse bars for Rigid pavement: 12mm dia @ 250mm c/c	19,874	3.00	unit weight:	0.89	53,063.58		
	Tie bars for Rigid pavement: 25 mm dia @ 1000 mm c/c	2,485	0.60	unit weight:	3.86	5,755.26		
3 Drainage and Structural Works								
3.1	Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	Total	including 5% extra for site adjustment			11,878.18	m3	
	for Drain: Ch: 0+000 to 5+600		from design calculation			4,916.48		
	for Structures: Ch: 0+000 to 5+600		from design calculation			6,396.07		
3.2	Earthwork excavation in Hard Rock for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	Total	including 5% extra for site adjustment			7,008.90	m3	
	for Drain: Ch: 5+600 to 6+350		from design calculation			672.13		
	for Structures: Ch: 5+600 to 6+350		from design calculation			6,003.01		
3.3	Earth Backfilling in layers including compaction, watering and lead etc., all complete work.	Total	including 5% extra for site adjustment			2,319.19	m3	
	for Structures: Ch: 0+000 to 5+600		from design calculation			1,020.38		
	for Structures: Ch: 5+600 to 6+350	1	from design calculation			1,188.37		
3.4	Providing and laying dry stone soling, all complete work.	Total				1,840.00	m3	
	for Drain/ Masonry Foundation: Ch: 0+000 to 6+350	1	8,840.00	1.00	0.20	1,768.00		
	for Breast/Retaining Structures foundation	1	200.00	1.80	0.20	72.00		
3.5	Providing and placing machine mixed M15/40 cement concrete including compaction, curing, testing and lead etc. all complete as per specification and drawing.	Total				920.00	m3	
	for Drain/ Masonry Foundation: Ch: 0+000 to 6+350	1	8,840.00	1.00	0.10	884.00		
	for Breast/Retaining Structures foundation	1	200.00	1.80	0.10	36.00		
3.6	Providing, Preparing and Installing formwork including necessary supports and removing after completion as per specification and drawing, all complete work.	Total	including 5% extra for site adjustment			1,877.40	m2	
	for Drain/ Masonry Foundation: Ch: 0+000 to 6+350	2	8,840.00	-	0.10	1,768.00		
	for Breast/Retaining Structures foundation	1	200.00	-	0.10	20.00		
3.7	Providing and laying Random rubble stone masonry in cement mortar [cement(1) : sand(4)] including scaffolding, curing, preparation of mortar, weep holes if necessary, etc. all complete as per specification, drawing, all complete work.	Total				3,126.60	m3	
	for Drain: Ch: 0+000 to 6+350	2	8,840.00	0.30	0.40	2,121.60		
	for Supporting Drain at Fill Sections: Ch: 0+000 to 4+360	1	430.00	1.00	0.50	215.00		
		1	100.00	1.00	1.00	100.00		
	Retaining Structures at various sections: Ch: 4+360 to 6+350	1	200.00	Area:	3.45	690.00		

S.No.	Description of Items	No.	Length (m)	Breadth (m)	Height (m)	Quantity	Unit	Remarks
3.8	Fabrication of hexagonal mesh type 100mm x 120 mm Gabion boxes/ mattresses with diapharagms, with binding wire 12 swg, mesh wire 10 swg and selvaged wire 8 swg, all heavy coated G.I. wire tying down the lid complete and providing and filling stone/boulder in gabion boxes/ mattresses etc as per drawings and specification, all complete work.	Total				12,973.75	m3	
	For Gabion retaining wall: Ch: 0+000 to 6+350	1	Quantity from attached sheet (GAB):			12,973.75		
3.9	Providing, laying and fixing of Geo-textile (filter fabrics) with necessary lead and lift, all complete work.	Total				5,350.00	m2	
	For Gabion retaining wall: Ch: 0+000 to 6+350	1	Quantity from attached sheet (GAB):			5,350.00		
4 Cross-drainage Works								
4.1	Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, struting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	Total				1,080.72	m3	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			30.02	1,080.72	
4.2	Earth Backfilling in layers including compaction, watering and lead etc., all complete work.	Total				196.20	m3	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			5.45	196.20	
4.3	Providing and laying dry stone masonry soling (coursed rubble) including dressing etc., all complete work.	Total				198.00	m3	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			5.50	198.00	
4.4	Providing and placing machine mixed M15/40 cement concrete including compaction, curing, testing and lead etc. all complete as per specification and drawing.	Total				79.20	m3	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			2.20	79.20	
4.5	Providing and laying Random rubble stone masonry in cement sand mortar [cement(1) : sand(4)] (manual mixing) including scaffolding, curing, preparation of mortar, lead etc., all complete work.	Total				254.52	m3	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			7.07	254.52	
4.6	Providing, Preparing and Installing form work including necessary supports and removing after completion, all complete work.	Total				178.92	m2	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			4.97	178.92	
4.7	Providing and laying NP3 RCC hume-pipes of diameter 600 mm (internal) with collars jointed with stiff mixture of cement mortar in theproportion of 1:2 (1 cement : 2 fine sand) , as per drawing and specification all complete work.	Total				270.00	Rm	
	Hume pipes at various chainages	108	2.50	-	-	270.00		
4.8	Providing, laying and fixing of Geo-textile (filter fabrics) with necessary lead and lift, all complete work.	Total				217.80	m2	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			6.05	217.80	
4.9	Providing, jointing and laying HDP pipes (110 mm outer diameter) with or without collar etc. complete in place as per specification.	Total				48.24	Rm	
	600mm dia humepipe with single opening	36	Quantity from attached sheet (PC):			1.34	48.24	
5 Miscellaneous Works								
5.1	Supplying and applying paint over new bitumen surface for Road marking including cleaning, watering, brooming etc. all complete (10cm. wide strip)	Total				7,937.50	Rm	
	Centre-line White marking (1.5m strips @ 4.5m spacing)	1	1,587.50	-	-	1,587.50		
	Edge Yellow marking (2m strips @ 2m spacing)	2	3,175.00	-	-	6,350.00		

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal
Quantity Calculation for Pipe Culvert

Pipe Length= 7.50 m
Internal Diameter= 0.60 m
Outer Diameter= 0.77 m

S.No.	Description of Items	No.	Length (m)	Breadth (m)	Height (m)	Quantity	Unit	Remarks
1	Earthwork excavation in Hard soil/Gravels/B.M.S. for trenches	Total				30.02	m3	
	for Humepipe	1	7.50	1.17	1.72	15.09		
	for Scour protection u/s & d/s	2	Area:	4.66	0.35	3.26		
	for Wing wall	4	1.95	0.38	0.60	1.75		
	for Head wall	2	2.42	0.89	1.97	8.49		
	Additional 5% for site adjustment		5% of 28.6			1.43		
2	Earth backfilling	Total				5.45	m3	
	over Humepipe bed	1	7.50	1.17	0.97	8.51		
	for Head wall	2	2.42	Area:	0.04	0.17		
	Deduction for Humepipe	1	7.50	Area:	0.47	3.49		
	Additional 5% for site adjustment		5% of 5.19			0.26		
3	Stone soling	Total				5.50	m3	
	for Humepipe bed	1	7.50	0.87	0.25	1.63		
	for Scour protection u/s & d/s	2	Area:	4.13	0.25	2.07		
	for Wing wall	4	1.95	0.38	0.25	0.73		
	for Head wall	2	2.42	0.89	0.25	1.08		
4	M15/40 Cement concrete	Total				2.20	m3	
	for Humepipe bed	1	7.50	0.87	0.10	0.65		
	for Scour protection u/s & d/s	2	Area:	4.13	0.10	0.83		
	for Wing wall	4	1.95	0.38	0.10	0.29		
	for Head wall	2	2.42	0.89	0.10	0.43		
5	Stone masonry in cement sand mortar [cement(1) : sand(4)]	Total				7.07	m3	
	for Wing wall	4	1.95	0.38	0.84	2.44		
	for Head wall	2	2.42	0.67	1.62	5.25		
	Deduction for Humepipe	2	0.67	Area:	0.47	0.62		
6	Formwork	Total				4.97	m2	
	for Humepipe bed	2	7.50	-	0.10	1.50		
	for Scour protection u/s & d/s	2	3.54	-	0.10	0.71		
	for Wing wall	8	1.95	-	0.10	1.56		
	for Head wall	4	2.42	-	0.10	0.97		
	Additional 5% for site adjustment		5% of 4.74			0.24		
7	Geotextiles	Total				6.05	m2	
	for Head wall	2	2.42	-	1.44	6.99		
	Deduction for Humepipe	2	-	Area:	0.47	0.93		
8	RCC pipes of 600mm diameter	Total				7.50	Rm	
		3.00	2.50	-	-	7.50		
9	HDP pipe for weephole	Total				1.34	Rm	
		2	0.67			1.34		

Gabion Retaining Wall Quantity

Chainage	Left					Right				
	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)
0+020	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+030	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+130	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+140	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+150	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+230	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+460	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+500	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+510	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+610	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+620	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
0+630	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+640	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+650	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
0+660	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
0+670	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
0+680	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
0+690	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+700	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+710	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+730	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+740	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+810	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+940	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
0+950	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
0+960	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
0+970	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
0+980	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
0+990	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+020	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+030	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+040	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+050	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+060	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+070	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+080	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+090	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+110	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+120	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+130	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+140	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+150	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+290	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
1+310	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
1+320	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
1+360	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+400	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+440	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+480	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+490	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+510	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
1+520	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
1+570	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-

Gabion Retaining Wall Quantity

Chainage	Left					Right				
	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)
1+580	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
1+590	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
1+600	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
1+610	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
1+620	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
1+630	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
1+640	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
1+730	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+740	-	-	-	-	-	10.00	4.00	7.00	70.00	30.00
1+750	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+800	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
1+900	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+910	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+920	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
1+930	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+940	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+950	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
1+960	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+000	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+010	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+420	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
2+430	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
2+880	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
2+890	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+910	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+920	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+930	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
2+940	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
3+200	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
3+210	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
3+260	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
3+270	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
3+280	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
3+290	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
3+300	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
3+310	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
3+330	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+340	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
3+430	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
3+440	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
3+450	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
3+580	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+590	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+600	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
3+680	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+690	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+700	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+710	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
3+720	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+730	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+910	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
3+920	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
3+930	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-

Gabion Retaining Wall Quantity

Chainage	Left					Right				
	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)
3+940	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+950	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
3+960	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
3+970	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
4+030	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+040	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+060	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+210	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+220	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+230	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+240	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+410	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+420	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+430	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+440	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+450	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+460	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+470	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+480	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+490	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+500	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+510	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+520	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+530	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+540	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+550	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+560	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+570	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+580	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+590	-	-	-	-	-	10.00	4.00	7.00	70.00	30.00
4+620	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+630	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+640	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+660	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+830	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+840	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+850	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+860	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+910	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+920	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+930	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
4+940	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
4+950	-	-	-	-	-	10.00	5.00	10.00	100.00	40.00
4+960	-	-	-	-	-	10.00	4.00	7.00	70.00	30.00
5+030	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+040	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+050	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+060	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+070	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+080	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+150	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+160	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+170	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-

Gabion Retaining Wall Quantity

Chainage	Left					Right				
	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)
5+180	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+190	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+210	-	-	-	-	-	10.00	2.00	2.50	25.00	10.00
5+220	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
5+230	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
5+240	-	-	-	-	-	10.00	4.00	7.00	70.00	30.00
5+250	-	-	-	-	-	10.00	4.00	7.00	70.00	30.00
5+260	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
5+310	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+320	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+330	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+340	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+350	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+370	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
5+380	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
5+390	-	-	-	-	-	10.00	3.00	4.50	45.00	20.00
5+400	-	-	-	-	-	10.00	5.00	10.00	100.00	40.00
5+460	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+470	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+480	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+490	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+500	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+510	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+520	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+530	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+540	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+580	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+590	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+600	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+610	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+620	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+630	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+640	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+650	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+660	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+670	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+740	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+750	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+760	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+770	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+780	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+790	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+800	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+810	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
5+820	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+830	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+840	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+850	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+860	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+870	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+880	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+890	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
5+900	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-

Gabion Retaining Wall Quantity

Chainage	Left					Right				
	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)	Length (m)	Height (m)	Area(m2)	Volume(m3)	Geotextiles (m2)
5+910	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+920	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+930	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+940	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+950	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+960	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
5+970	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
5+980	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
5+990	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+020	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
6+030	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+040	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+050	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+090	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+100	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+110	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+120	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+130	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
6+140	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+150	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+160	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+170	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+180	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+190	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+200	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+210	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+220	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+230	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+240	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+250	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+260	10.00	3.00	4.50	45.00	20.00	-	-	-	-	-
6+270	10.00	6.00	13.50	135.00	50.00	-	-	-	-	-
6+280	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
6+290	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
6+300	10.00	5.00	10.00	100.00	40.00	-	-	-	-	-
6+310	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+320	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+330	10.00	4.00	7.00	70.00	30.00	-	-	-	-	-
6+340	10.00	2.00	2.50	25.00	10.00	-	-	-	-	-
6+350	10.00	2.00	2.50	13.75	10.00	-	-	-	-	-
Total	1410.00			8863.75	3600.00	1110.00			4110.00	1750.00

BREAST/RETAINING WALL QUANTITY									
Chainage	Length	Left				Right			
		MWRET	Height	Area(m2)	Volume(m3)	MWRET	Height	Area(m2)	Volume(m3)
5280	10					MWBRTB	3	3.949	39.49
5290	10					MWBRTB	3	3.949	39.49
5420	10					MWBRTA	3	3.949	39.49
5430	10					MWBRTA	3	3.949	39.49
5440	10					MWBRTA	3	3.949	39.49
5450	10					MWBRTA	3	3.949	39.49
5460	10					MWBRTA	3	3.949	39.49
5710	10					MWBRTA	3	3.949	39.49
5720	10					MWBRTA	3	3.949	39.49
5730	10					MWBRTA	3	3.949	39.49
6230	10					MWBRTA	3	3.949	39.49
6240	10					MWBRTA	3	3.949	39.49
6250	10					MWBRTA	3	3.949	39.49
6270	10					MWBRTA	3	3.949	39.49
6280	10					MWBRTA	3	3.949	39.49
6290	10					MWBRTA	3	3.949	39.49
6300	10					MWBRTA	3	3.949	39.49
6310	10					MWBRTA	3	3.949	39.49
6340	10					MWBRTA	3	3.949	39.49
6350	10					MWBRTA	3	3.949	21.719

Length of Breast Wall 200 m

Earthwork Calculation

Sheet: (Cut/Fill)

Chainage	Area (m2)					Volume (m3)					
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill
Soil Type: BMS											
0+000	2.40	0.00	0.30	0.00	0.00	5.00	11.99	0.00	1.50	0.00	0.00
0+010	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0+020	0.46	2.55	0.00	2.35	0.13	10.00	4.58	25.48	0.00	23.53	1.30
0+030	0.09	1.85	0.00	2.07	0.02	10.00	0.88	18.50	0.00	20.68	0.23
0+040	2.36	1.42	1.39	0.00	0.00	10.00	23.58	14.23	13.93	0.00	0.00
0+050	4.86	0.00	1.45	0.00	0.00	10.00	48.63	0.00	14.50	0.00	0.00
0+060	8.12	0.00	1.40	0.00	0.00	10.00	81.23	0.03	14.00	0.00	0.00
0+070	5.13	0.00	1.45	0.00	0.00	10.00	51.30	0.00	14.50	0.00	0.00
0+080	1.86	0.03	0.53	0.00	0.00	10.00	18.60	0.25	5.33	0.00	0.00
0+090	5.43	0.03	0.70	0.00	0.00	10.00	54.25	0.28	7.00	0.00	0.00
0+100	2.68	0.00	0.75	0.00	0.00	10.00	26.78	0.00	7.50	0.00	0.00
0+110	0.32	0.25	0.00	1.00	0.00	10.00	3.20	2.53	0.00	10.00	0.00
0+120	0.39	0.34	0.44	0.00	0.00	10.00	3.90	3.43	4.35	0.00	0.00
0+130	0.14	0.19	0.00	1.90	0.16	10.00	1.40	1.88	0.00	19.03	1.60
0+140	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0+150	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0+160	1.89	0.47	0.57	0.64	0.00	10.00	18.93	4.65	5.70	6.38	0.00
0+170	0.58	0.19	0.90	0.00	0.00	10.00	5.83	1.90	9.03	0.00	0.00
0+180	0.34	0.89	0.67	0.00	0.00	10.00	3.43	8.93	6.68	0.00	0.00
0+190	1.64	0.12	1.02	0.00	0.00	10.00	16.43	1.15	10.23	0.00	0.00
0+200	3.45	0.03	0.63	0.00	0.00	10.00	34.53	0.25	6.25	0.00	0.00
0+210	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0+220	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0+230	2.35	0.02	0.60	2.25	0.30	10.00	23.53	0.20	6.00	22.50	2.98
0+240	2.82	0.11	1.03	0.00	0.00	10.00	28.15	1.10	10.30	0.00	0.00
0+250	2.25	0.11	1.17	0.00	0.00	10.00	22.45	1.13	11.73	0.00	0.00
0+260	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
0+270	3.34	0.29	1.00	0.00	0.00	10.00	33.35	2.85	9.98	0.00	0.00
0+280	12.33	0.00	1.45	0.00	0.00	10.00	123.30	0.00	14.50	0.00	0.00

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
0+290	10.55	0.00	1.45	0.00	0.00	10.00	105.45	0.00	14.50	0.00	0.00	
0+300	13.80	0.00	1.45	0.00	0.00	10.00	138.03	0.00	14.50	0.00	0.00	
0+310	12.93	0.00	1.45	0.00	0.00	10.00	129.33	0.00	14.50	0.00	0.00	
0+320	8.25	0.00	1.40	0.00	0.00	10.00	82.48	0.03	14.00	0.00	0.00	
0+330	4.95	0.00	1.45	0.00	0.00	10.00	49.53	0.00	14.50	0.00	0.00	
0+340	3.38	0.00	1.40	0.00	0.00	10.00	33.78	0.00	14.00	0.00	0.00	
0+350	0.70	0.34	1.44	0.00	0.00	10.00	6.98	3.40	14.40	0.00	0.00	
0+360	0.76	0.22	1.22	0.00	0.00	10.00	7.58	2.23	12.18	0.00	0.00	
0+370	0.33	0.53	0.00	0.99	0.00	10.00	3.25	5.33	0.00	9.88	0.00	
0+380	0.62	0.49	0.35	0.00	0.00	10.00	6.23	4.88	3.45	0.00	0.00	
0+390	2.11	0.01	0.63	0.00	0.00	10.00	21.13	0.05	6.30	0.00	0.00	
0+400	3.67	0.02	0.75	0.00	0.00	10.00	36.70	0.23	7.50	0.00	0.00	
0+410	6.71	0.00	1.45	0.00	0.00	10.00	67.08	0.00	14.50	0.00	0.00	
0+420	6.58	0.00	1.45	0.00	0.00	10.00	65.80	0.03	14.50	0.00	0.00	
0+430	3.99	0.00	1.45	0.00	0.00	10.00	39.88	0.00	14.50	0.00	0.00	
0+440	4.43	0.00	1.40	0.00	0.00	10.00	44.33	0.00	14.00	0.00	0.00	
0+450	1.68	0.13	0.70	0.00	0.00	10.00	16.80	1.30	7.00	0.00	0.00	
0+460	0.00	0.96	0.31	1.99	0.18	10.00	0.00	9.58	3.08	19.93	1.75	
0+470	0.00	0.85	0.05	0.95	0.00	10.00	0.00	8.50	0.50	9.50	0.00	
0+480	0.08	0.35	0.35	0.00	0.00	10.00	0.83	3.48	3.50	0.00	0.00	
0+490	0.00	1.15	0.53	0.00	0.00	10.00	0.00	11.48	5.28	0.00	0.00	
0+500	0.00	1.12	0.41	2.03	0.17	10.00	0.03	11.20	4.08	20.25	1.70	
0+510	0.00	1.28	0.40	1.88	0.12	10.00	0.00	12.83	4.00	18.75	1.20	
0+520	0.26	0.35	0.70	0.00	0.00	10.00	2.58	3.45	6.98	0.00	0.00	
0+530	0.77	0.09	1.42	0.00	0.00	10.00	7.65	0.85	14.15	0.00	0.00	
0+540	2.36	0.00	1.50	0.00	0.00	10.00	23.60	0.00	15.00	0.00	0.00	
0+550	1.56	0.05	0.70	0.00	0.00	10.00	15.55	0.48	7.00	0.00	0.00	
0+560	0.13	0.58	0.41	0.77	0.00	10.00	1.33	5.83	4.08	7.68	0.00	
0+570	0.16	0.30	0.51	0.99	0.00	10.00	1.60	3.00	5.08	9.85	0.00	
0+580	0.57	0.20	0.94	0.00	0.00	10.00	5.65	2.00	9.35	0.00	0.00	
0+590	1.09	0.20	0.50	0.82	0.00	10.00	10.88	2.03	5.03	8.15	0.00	
0+600	1.15	0.07	0.55	0.00	0.00	10.00	11.50	0.65	5.45	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
0+610	1.72	0.42	0.75	1.81	0.13	10.00	17.15	4.20	7.50	18.10	1.25	
0+620	0.19	1.35	0.65	1.88	0.12	10.00	1.93	13.48	6.50	18.75	1.20	
0+630	0.00	1.85	0.16	2.24	0.26	10.00	0.00	18.50	1.55	22.43	2.60	
0+640	0.00	3.16	0.25	1.56	0.06	10.00	0.00	31.55	2.48	15.60	0.63	
0+650	0.00	7.19	0.00	3.35	0.23	10.00	0.00	71.93	0.03	33.50	2.33	
0+660	0.00	9.11	0.00	3.95	0.32	10.00	0.00	91.05	0.00	39.53	3.23	
0+670	0.00	12.31	0.00	5.47	0.40	10.00	0.00	123.08	0.00	54.68	4.03	
0+680	0.00	8.39	0.00	2.93	0.00	10.00	0.00	83.85	0.00	29.28	0.00	
0+690	0.05	5.63	0.56	1.17	0.00	10.00	0.50	56.25	5.63	11.70	0.00	
0+700	0.16	2.88	0.74	1.31	0.00	10.00	1.58	28.78	7.35	13.10	0.00	
0+710	0.88	0.39	0.62	2.07	0.21	10.00	8.80	3.85	6.20	20.70	2.05	
0+720	0.00	0.98	0.60	0.00	0.00	10.00	0.00	9.80	5.95	0.00	0.00	
0+730	0.12	1.65	0.62	1.76	0.11	10.00	1.20	16.50	6.23	17.60	1.05	
0+740	0.00	2.46	0.44	1.55	0.04	10.00	0.00	24.55	4.38	15.45	0.38	
0+750	0.00	4.25	0.00	1.16	0.00	10.00	0.00	42.53	0.00	11.58	0.00	
0+760	0.00	5.45	0.00	0.80	0.00	10.00	0.00	54.53	0.00	8.00	0.00	
0+770	0.00	3.90	0.00	1.32	0.00	10.00	0.00	39.00	0.00	13.20	0.00	
0+780	0.00	1.68	0.34	0.42	0.00	10.00	0.00	16.78	3.35	4.23	0.00	
0+790	0.00	1.41	0.45	0.77	0.00	10.00	0.00	14.10	4.50	7.70	0.00	
0+800	0.07	0.38	0.92	0.00	0.00	10.00	0.70	3.83	9.23	0.00	0.00	
0+810	1.80	0.34	0.53	1.80	0.14	10.00	18.03	3.35	5.28	18.00	1.40	
0+820	0.24	0.37	1.19	0.00	0.00	10.00	2.38	3.73	11.88	0.00	0.00	
0+830	0.05	1.00	0.37	0.00	0.00	10.00	0.45	9.98	3.65	0.00	0.00	
0+840	0.76	1.02	0.71	0.00	0.00	10.00	7.58	10.20	7.13	0.00	0.00	
0+850	0.66	0.06	0.00	0.94	0.00	10.00	6.58	0.63	0.00	9.40	0.00	
0+860	8.48	0.00	1.45	0.00	0.00	10.00	84.83	0.00	14.50	0.00	0.00	
0+870	15.43	0.00	1.45	0.00	0.00	10.00	154.30	0.00	14.50	0.00	0.00	
0+880	20.46	0.00	1.45	0.00	0.00	10.00	204.58	0.00	14.50	0.00	0.00	
0+890	19.96	0.00	1.45	0.00	0.00	10.00	199.58	0.00	14.50	0.00	0.00	
0+900	22.70	0.00	1.50	0.00	0.00	10.00	226.98	0.03	15.00	0.00	0.00	
0+910	26.44	0.00	1.50	0.00	0.00	10.00	264.38	0.03	15.00	0.00	0.00	
0+920	16.12	0.00	1.45	0.00	0.00	10.00	161.15	0.00	14.50	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
0+930	4.47	0.00	1.50	0.00	0.00	10.00	44.65	0.03	14.98	0.00	0.00	
0+940	0.00	2.45	0.00	4.23	0.35	10.00	0.00	24.48	0.00	42.33	3.48	
0+950	0.00	8.47	0.00	4.43	0.30	10.00	0.00	84.70	0.00	44.25	2.95	
0+960	0.00	10.27	0.00	3.10	0.15	10.00	0.00	102.73	0.00	30.95	1.48	
0+970	1.77	4.00	0.70	1.27	0.00	10.00	17.73	40.00	7.00	12.73	0.00	
0+980	5.70	1.31	0.70	3.66	0.48	10.00	56.95	13.10	7.00	36.60	4.78	
0+990	6.99	1.82	0.75	3.56	0.44	10.00	69.93	18.23	7.50	35.60	4.40	
1+000	2.21	0.43	0.70	0.00	0.00	10.00	22.08	4.25	7.00	0.00	0.00	
1+010	0.50	0.54	0.87	0.00	0.00	10.00	4.98	5.38	8.65	0.00	0.00	
1+020	0.33	1.24	0.75	1.81	0.12	10.00	3.30	12.38	7.48	18.05	1.15	
1+030	0.00	4.01	0.49	3.12	0.31	10.00	0.00	40.10	4.90	31.20	3.08	
1+040	0.00	4.51	0.21	2.85	0.25	10.00	0.00	45.05	2.13	28.53	2.45	
1+050	0.05	3.84	0.63	1.30	0.00	10.00	0.45	38.35	6.33	12.95	0.00	
1+060	0.64	3.60	0.75	1.11	0.00	10.00	6.38	36.00	7.50	11.13	0.00	
1+070	0.65	2.09	0.63	1.57	0.01	10.00	6.45	20.88	6.30	15.73	0.05	
1+080	3.87	0.33	0.75	1.71	0.12	10.00	38.73	3.30	7.50	17.08	1.23	
1+090	0.86	0.68	0.75	3.57	0.52	10.00	8.60	6.75	7.50	35.70	5.15	
1+100	6.87	1.11	0.70	0.73	0.00	10.00	68.73	11.08	7.00	7.25	0.00	
1+110	0.00	4.40	0.00	3.18	0.30	10.00	0.00	44.00	0.00	31.75	3.00	
1+120	1.13	3.85	0.70	2.74	0.26	10.00	11.28	38.45	7.00	27.35	2.63	
1+130	0.00	3.31	0.56	3.39	0.41	10.00	0.00	33.05	5.63	33.90	4.05	
1+140	8.74	1.42	0.75	2.80	0.31	10.00	87.35	14.15	7.50	28.00	3.05	
1+150	13.12	0.90	0.70	3.59	0.44	10.00	131.20	9.03	7.00	35.90	4.43	
1+160	14.00	0.00	1.45	0.00	0.00	10.00	139.95	0.00	14.50	0.00	0.00	
1+170	22.59	0.00	1.50	0.00	0.00	10.00	225.93	0.00	15.00	0.00	0.00	
1+180	28.19	0.00	1.45	0.00	0.00	10.00	281.90	0.00	14.50	0.00	0.00	
1+190	23.01	0.00	1.45	0.00	0.00	10.00	230.08	0.00	14.50	0.00	0.00	
1+200	15.86	0.00	1.09	0.00	0.00	10.00	158.63	0.03	10.88	0.00	0.00	
1+210	14.88	0.00	1.50	0.00	0.00	10.00	148.80	0.00	15.00	0.00	0.00	
1+220	17.71	0.00	1.50	0.00	0.00	10.00	177.10	0.00	15.00	0.00	0.00	
1+230	33.71	0.00	1.50	0.00	0.00	10.00	337.08	0.00	15.00	0.00	0.00	
1+240	24.10	0.00	1.50	0.00	0.00	10.00	241.03	0.00	15.00	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
1+250	18.15	0.00	1.40	0.00	0.00	10.00	181.48	0.00	14.00	0.00	0.00	
1+260	13.46	0.00	1.50	0.00	0.00	10.00	134.58	0.00	15.00	0.00	0.00	
1+270	7.44	0.00	1.50	0.00	0.00	10.00	74.35	0.00	15.00	0.00	0.00	
1+280	1.06	0.53	0.75	0.00	0.00	10.00	10.63	5.33	7.50	0.00	0.00	
1+290	0.00	4.48	0.36	1.37	0.01	10.00	0.00	44.83	3.58	13.73	0.05	
1+300	0.00	4.85	0.53	0.00	0.00	10.00	0.00	48.48	5.25	0.00	0.00	
1+310	0.00	5.86	0.22	1.56	0.02	10.00	0.00	58.58	2.18	15.58	0.15	
1+320	0.00	6.67	0.48	2.88	0.22	10.00	0.00	66.65	4.75	28.78	2.20	
1+330	2.64	1.50	0.75	0.00	0.00	10.00	26.35	14.95	7.50	0.00	0.00	
1+340	20.92	0.00	1.45	0.00	0.00	10.00	209.23	0.00	14.50	0.00	0.00	
1+350	11.08	0.00	1.40	0.00	0.00	10.00	110.83	0.00	14.00	0.00	0.00	
1+360	10.26	0.06	0.70	1.96	0.22	10.00	102.55	0.63	7.00	19.55	2.15	
1+370	14.00	0.00	1.50	0.00	0.00	10.00	140.03	0.00	15.00	0.00	0.00	
1+380	11.42	0.00	1.45	0.00	0.00	10.00	114.23	0.03	14.50	0.00	0.00	
1+390	7.17	0.00	1.45	0.00	0.00	10.00	71.68	0.00	14.50	0.00	0.00	
1+400	3.81	0.20	0.75	1.68	0.13	10.00	38.10	2.03	7.50	16.83	1.25	
1+410	4.26	0.14	0.70	0.00	0.00	10.00	42.55	1.43	7.00	0.00	0.00	
1+420	9.01	0.00	1.50	0.00	0.00	10.00	90.10	0.03	15.00	0.00	0.00	
1+430	19.44	0.00	1.40	0.00	0.00	10.00	194.43	0.00	14.00	0.00	0.00	
1+440	10.38	0.48	0.70	1.33	0.04	10.00	103.83	4.75	7.00	13.28	0.40	
1+450	4.66	0.29	0.75	0.00	0.00	10.00	46.55	2.88	7.50	0.00	0.00	
1+460	0.69	0.11	0.61	0.00	0.00	10.00	6.85	1.10	6.08	0.00	0.00	
1+470	1.05	0.22	0.75	0.00	0.00	10.00	10.45	2.20	7.50	0.00	0.00	
1+480	0.02	0.99	0.55	1.88	0.14	10.00	0.18	9.85	5.45	18.83	1.43	
1+490	0.00	3.35	0.00	3.68	0.35	10.00	0.00	33.45	0.00	36.75	3.48	
1+500	0.00	3.52	0.00	0.55	0.00	10.00	0.00	35.15	0.00	5.50	0.00	
1+510	0.01	2.56	0.60	1.95	0.14	10.00	0.10	25.55	6.00	19.45	1.35	
1+520	0.59	1.64	0.70	2.10	0.20	10.00	5.90	16.38	7.00	21.00	1.95	
1+530	1.71	0.08	0.70	0.00	0.00	10.00	17.08	0.75	7.00	0.00	0.00	
1+540	4.94	0.00	1.40	0.00	0.00	10.00	49.35	0.00	14.00	0.00	0.00	
1+550	3.50	0.00	1.45	0.00	0.00	10.00	35.03	0.00	14.50	0.00	0.00	
1+560	0.86	0.22	0.70	0.00	0.00	10.00	8.58	2.15	7.00	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
1+570	0.15	2.62	0.73	1.77	0.08	10.00	1.45	26.20	7.28	17.65	0.78	
1+580	0.00	8.10	0.00	3.62	0.21	10.00	0.00	81.03	0.00	36.15	2.13	
1+590	0.00	12.94	0.00	4.31	0.28	10.00	0.00	129.40	0.00	43.10	2.80	
1+600	0.00	10.40	0.00	4.70	0.28	10.00	0.00	103.98	0.00	47.00	2.80	
1+610	0.96	5.57	0.75	1.96	0.07	10.00	9.55	55.65	7.50	19.55	0.73	
1+620	5.63	3.24	0.70	3.05	0.25	10.00	56.33	32.38	7.00	30.50	2.45	
1+630	9.49	1.30	0.70	4.00	0.45	10.00	94.90	12.98	7.00	39.98	4.48	
1+640	4.31	1.94	0.70	1.90	0.12	10.00	43.08	19.38	7.00	19.00	1.15	
1+650	0.83	0.44	0.30	0.00	0.00	10.00	8.28	4.40	3.00	0.00	0.00	
1+660	1.17	0.36	0.60	0.00	0.00	10.00	11.68	3.58	6.00	0.00	0.00	
1+670	4.03	0.00	1.45	0.00	0.00	10.00	40.28	0.00	14.50	0.00	0.00	
1+680	9.17	0.00	1.45	0.00	0.00	10.00	91.70	0.00	14.50	0.00	0.00	
1+690	6.43	0.00	1.45	0.00	0.00	10.00	64.30	0.00	14.50	0.00	0.00	
1+700	12.61	0.00	1.45	0.00	0.00	10.00	126.05	0.00	14.50	0.00	0.00	
1+710	45.66	0.00	1.50	0.00	0.00	10.00	456.63	0.00	15.00	0.00	0.00	
1+720	11.40	0.00	1.49	0.00	0.00	10.00	113.98	0.00	14.90	0.00	0.00	
1+730	1.96	1.46	0.70	2.59	0.27	10.00	19.55	14.58	7.00	25.93	2.68	
1+740	3.02	3.00	0.75	4.45	0.56	10.00	30.18	30.00	7.50	44.48	5.60	
1+750	7.38	1.12	0.70	3.31	0.40	10.00	73.75	11.15	7.00	33.10	3.98	
1+760	18.69	0.00	1.40	0.00	0.00	10.00	186.85	0.00	14.00	0.00	0.00	
1+770	15.96	0.01	1.45	0.00	0.00	10.00	159.58	0.13	14.50	0.00	0.00	
1+780	9.89	0.00	1.45	0.00	0.00	10.00	98.88	0.00	14.50	0.00	0.00	
1+790	2.33	2.34	0.75	0.00	0.00	10.00	23.33	23.43	7.50	0.00	0.00	
1+800	0.00	7.10	0.33	0.18	0.00	10.00	0.00	70.98	3.25	1.83	0.00	
1+810	0.00	13.79	0.27	0.00	0.00	10.00	0.00	137.88	2.65	0.00	0.00	
1+820	14.07	5.08	0.75	0.00	0.00	10.00	140.65	50.83	7.50	0.00	0.00	
1+830	3.62	11.41	0.70	0.00	0.00	10.00	36.23	114.10	7.00	0.00	0.00	
1+840	0.00	8.43	0.19	0.00	0.00	10.00	0.00	84.25	1.85	0.00	0.00	
1+850	0.00	9.72	0.25	0.00	0.00	10.00	0.00	97.18	2.50	0.00	0.00	
1+860	0.34	6.61	0.70	0.00	0.00	10.00	3.35	66.08	7.00	0.00	0.00	
1+870	7.40	7.57	0.75	0.00	0.00	10.00	74.03	75.68	7.50	0.00	0.00	
1+880	2.21	10.27	0.70	0.00	0.00	10.00	22.13	102.73	7.00	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
1+890	0.05	11.56	0.43	0.00	0.00	10.00	0.53	115.55	4.33	0.00	0.00	
1+900	0.00	10.59	0.00	0.00	0.00	10.00	0.00	105.90	0.00	0.00	0.00	
1+910	0.00	11.92	0.00	0.00	0.00	10.00	0.03	119.15	0.00	0.00	0.00	
1+920	0.00	11.67	0.00	0.69	0.00	10.00	0.00	116.73	0.00	6.88	0.00	
1+930	0.00	9.85	0.00	0.00	0.00	10.00	0.00	98.53	0.00	0.00	0.00	
1+940	0.10	8.73	0.23	0.25	0.00	10.00	0.98	87.33	2.30	2.50	0.00	
1+950	5.53	7.78	0.70	0.44	0.00	10.00	55.28	77.75	7.00	4.35	0.00	
1+960	0.72	8.20	0.43	1.39	0.01	10.00	7.23	81.95	4.28	13.90	0.05	
1+970	0.09	7.26	0.29	0.00	0.00	10.00	0.90	72.55	2.88	0.00	0.00	
1+980	0.00	8.95	0.00	0.05	0.00	10.00	0.00	89.50	0.00	0.50	0.00	
1+990	0.00	9.93	0.00	0.00	0.00	10.00	0.00	99.33	0.00	0.00	0.00	
2+000	0.00	6.27	0.53	0.80	0.00	10.00	0.00	62.65	5.25	7.98	0.00	
2+010	0.00	6.56	0.14	1.15	0.00	10.00	0.00	65.60	1.38	11.53	0.00	
2+020	0.00	4.87	0.70	0.00	0.00	10.00	0.00	48.68	7.00	0.00	0.00	
2+030	0.05	3.53	0.65	0.00	0.00	10.00	0.53	35.25	6.48	0.00	0.00	
2+040	4.77	1.92	0.75	0.00	0.00	10.00	47.70	19.18	7.50	0.00	0.00	
2+050	10.60	0.34	1.41	0.00	0.00	10.00	106.03	3.38	14.05	0.00	0.00	
2+060	0.34	1.22	0.01	0.69	0.00	10.00	3.43	12.18	0.05	6.85	0.00	
2+070	0.55	0.53	1.21	0.00	0.00	10.00	5.50	5.28	12.10	0.00	0.00	
2+080	0.16	0.48	0.25	0.00	0.00	10.00	1.63	4.78	2.50	0.00	0.00	
2+090	2.61	0.04	0.75	0.00	0.00	10.00	26.10	0.38	7.50	0.00	0.00	
2+100	1.72	0.20	0.75	0.00	0.00	10.00	17.20	1.98	7.50	0.00	0.00	
2+110	0.97	0.00	1.20	0.00	0.00	10.00	9.68	0.00	11.95	0.00	0.00	
2+120	4.72	0.00	1.45	0.00	0.00	10.00	47.15	0.00	14.50	0.00	0.00	
2+130	16.02	0.00	1.45	0.00	0.00	10.00	160.20	0.00	14.50	0.00	0.00	
2+140	11.82	0.00	0.75	0.00	0.00	10.00	118.18	0.03	7.50	0.00	0.00	
2+150	10.58	0.00	0.70	0.00	0.00	10.00	105.78	0.00	7.00	0.00	0.00	
2+160	20.21	0.00	1.50	0.00	0.00	10.00	202.13	0.00	15.00	0.00	0.00	
2+170	24.41	0.00	0.70	0.00	0.00	10.00	244.10	0.00	7.00	0.00	0.00	
2+180	27.34	0.00	1.50	0.00	0.00	10.00	273.35	0.00	15.00	0.00	0.00	
2+190	40.58	0.00	1.50	0.00	0.00	10.00	405.80	0.00	15.00	0.00	0.00	
2+200	45.06	0.00	1.50	0.00	0.00	10.00	450.55	0.00	15.00	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
2+210	64.84	0.00	1.45	0.00	0.00	10.00	648.43	0.00	14.50	0.00	0.00	
2+220	60.83	0.00	1.45	0.00	0.00	10.00	608.30	0.00	14.50	0.00	0.00	
2+230	49.47	0.00	1.50	0.00	0.00	10.00	494.70	0.00	15.00	0.00	0.00	
2+240	37.79	0.00	1.50	0.00	0.00	10.00	377.85	0.00	15.00	0.00	0.00	
2+250	31.25	0.00	1.45	0.00	0.00	10.00	312.50	0.00	14.50	0.00	0.00	
2+260	30.91	0.00	1.45	0.00	0.00	10.00	309.13	0.00	14.50	0.00	0.00	
2+270	35.15	0.00	1.40	0.00	0.00	10.00	351.50	0.00	14.00	0.00	0.00	
2+280	45.54	0.00	1.50	0.00	0.00	10.00	455.35	0.00	15.00	0.00	0.00	
2+290	43.46	0.00	1.40	0.00	0.00	10.00	434.63	0.00	14.00	0.00	0.00	
2+300	31.39	0.00	1.45	0.00	0.00	10.00	313.85	0.00	14.50	0.00	0.00	
2+310	24.64	0.00	1.45	0.00	0.00	10.00	246.38	0.00	14.50	0.00	0.00	
2+320	19.29	0.00	1.50	0.00	0.00	10.00	192.88	0.03	15.00	0.00	0.00	
2+330	19.86	0.00	1.45	0.00	0.00	10.00	198.55	0.03	14.50	0.00	0.00	
2+340	18.59	0.00	1.40	0.00	0.00	10.00	185.88	0.00	14.00	0.00	0.00	
2+350	8.24	0.19	1.37	0.00	0.00	10.00	82.35	1.90	13.65	0.00	0.00	
2+360	3.17	0.04	1.42	0.00	0.00	10.00	31.70	0.40	14.20	0.00	0.00	
2+370	9.25	0.00	1.43	0.00	0.00	10.00	92.48	0.03	14.25	0.00	0.00	
2+380	6.72	0.27	1.10	0.00	0.00	10.00	67.15	2.70	11.00	0.00	0.00	
2+390	4.99	0.89	0.77	0.00	0.00	10.00	49.85	8.90	7.73	0.00	0.00	
2+400	1.44	4.11	0.75	0.00	0.00	10.00	14.40	41.13	7.50	0.00	0.00	
2+410	0.05	14.84	0.57	0.00	0.00	10.00	0.48	148.38	5.70	0.00	0.00	
2+420	0.00	26.35	0.00	0.00	0.00	10.00	0.03	263.50	0.00	0.00	0.00	
2+430	0.00	43.40	0.00	0.00	0.00	10.00	0.00	434.00	0.00	0.00	0.00	
2+440	0.00	41.64	0.00	0.00	0.00	10.00	0.00	416.38	0.00	0.00	0.00	
2+450	0.00	31.09	0.00	0.00	0.00	10.00	0.00	310.85	0.00	0.00	0.00	
2+460	0.00	25.65	0.00	0.00	0.00	10.00	0.00	256.45	0.00	0.00	0.00	
2+470	0.00	23.19	0.00	0.00	0.00	10.00	0.00	231.88	0.00	0.00	0.00	
2+480	0.00	22.97	0.00	0.00	0.00	10.00	0.00	229.65	0.00	0.00	0.00	
2+490	0.00	22.55	0.00	0.00	0.00	10.00	0.00	225.50	0.00	0.00	0.00	
2+500	0.00	13.07	0.00	0.00	0.00	10.00	0.00	130.73	0.00	0.00	0.00	
2+510	0.00	4.88	0.00	0.00	0.00	10.00	0.00	48.83	0.00	0.00	0.00	
2+520	0.00	1.37	0.75	0.00	0.00	10.00	0.00	13.70	7.53	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
2+530	2.83	0.07	1.42	0.00	0.00	10.00	28.28	0.70	14.18	0.00	0.00	
2+540	9.35	0.00	1.50	0.00	0.00	10.00	93.50	0.00	15.00	0.00	0.00	
2+550	13.28	0.00	1.45	0.00	0.00	10.00	132.80	0.00	14.50	0.00	0.00	
2+560	16.34	0.00	1.40	0.00	0.00	10.00	163.43	0.00	14.00	0.00	0.00	
2+570	25.19	0.00	1.45	0.00	0.00	10.00	251.85	0.00	14.50	0.00	0.00	
2+580	30.54	0.00	1.45	0.00	0.00	10.00	305.35	0.00	14.50	0.00	0.00	
2+590	32.69	0.00	1.40	0.00	0.00	10.00	326.93	0.00	14.00	0.00	0.00	
2+600	32.59	0.00	1.45	0.00	0.00	10.00	325.88	0.00	14.50	0.00	0.00	
2+610	27.44	0.00	1.45	0.00	0.00	10.00	274.43	0.00	14.50	0.00	0.00	
2+620	22.67	0.00	1.50	0.00	0.00	10.00	226.68	0.00	15.00	0.00	0.00	
2+630	18.45	0.00	1.45	0.00	0.00	10.00	184.45	0.00	14.50	0.00	0.00	
2+640	13.40	0.00	1.50	0.00	0.00	10.00	134.00	0.00	15.00	0.00	0.00	
2+650	7.16	0.00	1.40	0.00	0.00	10.00	71.58	0.00	14.00	0.00	0.00	
2+660	2.27	0.21	1.07	0.00	0.00	10.00	22.68	2.13	10.73	0.00	0.00	
2+670	0.00	5.36	0.00	0.00	0.00	10.00	0.00	53.63	0.00	0.00	0.00	
2+680	0.00	14.25	0.00	0.00	0.00	10.00	0.00	142.48	0.00	0.00	0.00	
2+690	0.00	14.86	0.00	0.00	0.00	10.00	0.00	148.58	0.00	0.00	0.00	
2+700	0.00	11.88	0.00	0.00	0.00	10.00	0.00	118.78	0.00	0.00	0.00	
2+710	2.54	5.27	0.75	0.00	0.00	10.00	25.40	52.70	7.50	0.00	0.00	
2+720	1.67	2.90	0.70	0.00	0.00	10.00	16.65	28.98	7.00	0.00	0.00	
2+730	1.48	3.58	0.28	0.00	0.00	10.00	14.78	35.80	2.80	0.00	0.00	
2+740	0.51	2.78	0.70	0.00	0.00	10.00	5.10	27.75	7.00	0.00	0.00	
2+750	5.74	0.91	0.83	0.00	0.00	10.00	57.35	9.08	8.28	0.00	0.00	
2+760	6.77	0.00	1.45	0.00	0.00	10.00	67.73	0.03	14.50	0.00	0.00	
2+770	8.64	0.00	1.45	0.00	0.00	10.00	86.43	0.00	14.50	0.00	0.00	
2+780	8.48	0.00	1.40	0.00	0.00	10.00	84.83	0.00	14.00	0.00	0.00	
2+790	10.89	0.00	1.45	0.00	0.00	10.00	108.90	0.00	14.50	0.00	0.00	
2+800	12.83	0.00	1.40	0.00	0.00	10.00	128.30	0.03	14.00	0.00	0.00	
2+810	13.24	0.00	1.45	0.00	0.00	10.00	132.43	0.00	14.50	0.00	0.00	
2+820	13.39	0.00	0.70	0.00	0.00	10.00	133.90	0.00	7.00	0.00	0.00	
2+830	13.72	0.00	0.70	0.00	0.00	10.00	137.23	0.00	7.00	0.00	0.00	
2+840	16.72	0.00	0.75	0.00	0.00	10.00	167.15	0.00	7.50	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
2+850	23.97	0.00	1.40	0.00	0.00	10.00	239.65	0.00	14.00	0.00	0.00	
2+860	19.69	0.00	1.45	0.00	0.00	10.00	196.90	0.00	14.50	0.00	0.00	
2+870	17.27	0.00	0.75	0.00	0.00	10.00	172.73	0.00	7.50	0.00	0.00	
2+880	11.39	0.02	0.75	5.30	1.04	10.00	113.85	0.15	7.50	53.00	10.40	
2+890	6.20	0.00	0.75	2.55	0.33	10.00	61.98	0.00	7.50	25.50	3.30	
2+900	6.00	0.01	0.70	0.00	0.00	10.00	60.03	0.05	7.00	0.00	0.00	
2+910	2.03	0.38	0.75	1.88	0.13	10.00	20.25	3.75	7.50	18.83	1.28	
2+920	2.32	0.01	0.75	2.48	0.33	10.00	23.20	0.05	7.50	24.75	3.25	
2+930	1.13	0.43	0.75	1.99	0.17	10.00	11.28	4.33	7.50	19.93	1.70	
2+940	0.40	0.34	0.55	1.88	0.16	10.00	3.95	3.38	5.50	18.83	1.58	
2+950	7.60	0.00	0.75	0.00	0.00	10.00	76.00	0.00	7.50	0.00	0.00	
2+960	7.91	0.15	0.75	0.00	0.00	10.00	79.08	1.53	7.50	0.00	0.00	
2+970	9.33	0.00	1.45	0.00	0.00	10.00	93.33	0.00	14.50	0.00	0.00	
2+980	8.07	0.00	1.45	0.00	0.00	10.00	80.70	0.00	14.50	0.00	0.00	
2+990	5.32	0.00	1.49	0.00	0.00	10.00	53.15	0.03	14.93	0.00	0.00	
3+000	3.33	0.00	1.45	0.00	0.00	10.00	33.25	0.00	14.50	0.00	0.00	
3+010	2.07	0.00	1.45	0.00	0.00	10.00	20.65	0.00	14.50	0.00	0.00	
3+020	0.62	0.41	0.75	0.00	0.00	10.00	6.15	4.08	7.50	0.00	0.00	
3+030	0.79	0.42	0.70	0.00	0.00	10.00	7.88	4.20	7.00	0.00	0.00	
3+040	2.44	0.00	1.44	0.00	0.00	10.00	24.43	0.03	14.43	0.00	0.00	
3+050	8.09	0.00	1.45	0.00	0.00	10.00	80.90	0.00	14.50	0.00	0.00	
3+060	14.37	0.00	1.45	0.00	0.00	10.00	143.65	0.00	14.50	0.00	0.00	
3+070	18.19	0.00	1.40	0.00	0.00	10.00	181.93	0.00	14.00	0.00	0.00	
3+080	13.14	0.00	1.45	0.00	0.00	10.00	131.38	0.00	14.50	0.00	0.00	
3+090	6.46	0.00	1.50	0.00	0.00	10.00	64.63	0.00	15.00	0.00	0.00	
3+100	5.97	0.08	1.40	0.00	0.00	10.00	59.73	0.80	14.00	0.00	0.00	
3+110	0.00	6.44	0.00	0.00	0.00	10.00	0.00	64.35	0.00	0.00	0.00	
3+120	0.00	9.53	0.00	0.00	0.00	10.00	0.00	95.33	0.00	0.00	0.00	
3+130	0.31	7.02	0.48	0.00	0.00	10.00	3.10	70.15	4.75	0.00	0.00	
3+140	0.00	4.78	0.17	0.00	0.00	10.00	0.03	47.80	1.73	0.00	0.00	
3+150	0.00	1.68	0.72	0.00	0.00	10.00	0.00	16.80	7.20	0.00	0.00	
3+160	0.10	2.39	0.67	0.00	0.00	10.00	1.00	23.85	6.73	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
3+170	0.00	4.67	0.38	0.00	0.00	10.00	0.00	46.70	3.78	0.00	0.00	
3+180	0.00	3.17	0.53	0.00	0.00	10.00	0.00	31.70	5.33	0.00	0.00	
3+190	0.06	1.34	0.35	0.00	0.00	10.00	0.60	13.38	3.48	0.00	0.00	
3+200	0.00	4.44	0.35	0.05	0.00	10.00	0.00	44.35	3.53	0.45	0.00	
3+210	0.00	2.89	0.38	0.39	0.00	10.00	0.00	28.90	3.78	3.90	0.00	
3+220	0.49	1.40	0.49	0.00	0.00	10.00	4.85	14.03	4.85	0.00	0.00	
3+230	2.70	0.39	0.70	0.00	0.00	10.00	27.03	3.90	7.00	0.00	0.00	
3+240	18.79	0.00	1.40	0.00	0.00	10.00	187.88	0.03	14.00	0.00	0.00	
3+250	3.10	0.00	1.45	0.00	0.00	10.00	30.98	0.00	14.50	0.00	0.00	
3+260	1.16	0.44	0.70	1.64	0.10	10.00	11.60	4.40	7.00	16.35	1.03	
3+270	0.29	0.72	0.66	1.36	0.04	10.00	2.90	7.23	6.63	13.63	0.38	
3+280	0.01	1.23	0.48	5.82	1.41	10.00	0.10	12.30	4.83	58.15	14.08	
3+290	0.00	1.72	0.00	5.74	0.78	10.00	0.00	17.23	0.00	57.40	7.80	
3+300	0.00	4.49	0.00	5.66	0.76	10.00	0.03	44.88	0.00	56.55	7.60	
3+310	0.00	7.27	0.00	1.30	0.00	10.00	0.00	72.65	0.00	13.00	0.00	
3+320	0.00	8.38	0.00	0.62	0.00	10.00	0.00	83.75	0.00	6.20	0.00	
3+330	5.04	0.27	0.75	4.69	1.02	10.00	50.40	2.70	7.50	46.90	10.18	
3+340	1.00	0.60	0.60	1.99	0.17	10.00	9.98	5.98	6.00	19.85	1.65	
3+350	14.36	0.00	1.40	0.00	0.00	10.00	143.55	0.00	14.00	0.00	0.00	
3+360	23.41	0.00	1.40	0.00	0.00	10.00	234.08	0.03	14.00	0.00	0.00	
3+370	22.25	0.00	1.45	0.00	0.00	10.00	222.53	0.00	14.50	0.00	0.00	
3+380	19.63	0.00	1.50	0.00	0.00	10.00	196.28	0.00	15.00	0.00	0.00	
3+390	13.78	0.00	1.45	0.00	0.00	10.00	137.80	0.00	14.50	0.00	0.00	
3+400	6.50	0.01	0.70	0.00	0.00	10.00	65.03	0.08	7.00	0.00	0.00	
3+410	4.38	0.46	0.70	0.00	0.00	10.00	43.83	4.58	7.00	0.00	0.00	
3+420	3.64	0.45	0.70	0.00	0.00	10.00	36.35	4.53	7.00	0.00	0.00	
3+430	2.88	0.68	0.70	3.28	0.44	10.00	28.83	6.83	7.00	32.78	4.35	
3+440	3.26	1.01	0.70	3.25	0.42	10.00	32.55	10.05	7.00	32.53	4.20	
3+450	4.88	1.39	0.70	3.18	0.34	10.00	48.83	13.90	7.00	31.75	3.43	
3+460	14.73	0.30	0.70	0.00	0.00	10.00	147.25	3.00	7.00	0.00	0.00	
3+470	17.47	0.00	1.45	0.00	0.00	10.00	174.73	0.00	14.50	0.00	0.00	
3+480	29.45	0.00	1.45	0.00	0.00	10.00	294.50	0.03	14.50	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
3+490	22.04	0.00	1.45	0.00	0.00	10.00	220.43	0.00	14.50	0.00	0.00	
3+500	15.30	0.00	1.45	0.00	0.00	10.00	153.03	0.00	14.50	0.00	0.00	
3+510	12.44	0.00	1.45	0.00	0.00	10.00	124.40	0.03	14.50	0.00	0.00	
3+520	14.13	0.00	1.40	0.00	0.00	10.00	141.25	0.03	14.00	0.00	0.00	
3+530	16.00	0.01	0.75	0.00	0.00	10.00	160.03	0.13	7.50	0.00	0.00	
3+540	7.65	0.00	1.40	0.00	0.00	10.00	76.48	0.00	14.00	0.00	0.00	
3+550	9.88	0.00	1.45	0.00	0.00	10.00	98.83	0.00	14.50	0.00	0.00	
3+560	2.42	0.00	1.45	0.00	0.00	10.00	24.15	0.00	14.50	0.00	0.00	
3+570	0.00	3.26	0.30	0.00	0.00	10.00	0.00	32.60	2.95	0.00	0.00	
3+580	0.44	4.74	0.74	3.29	0.32	10.00	4.43	47.43	7.40	32.85	3.20	
3+590	0.00	2.86	0.36	2.99	0.32	10.00	0.00	28.55	3.55	29.93	3.23	
3+600	1.74	0.78	0.70	1.42	0.03	10.00	17.43	7.80	7.00	14.20	0.30	
3+610	5.99	0.00	1.45	0.00	0.00	10.00	59.93	0.00	14.50	0.00	0.00	
3+620	10.16	0.00	1.45	0.00	0.00	10.00	101.55	0.00	14.50	0.00	0.00	
3+630	13.87	0.00	1.45	0.00	0.00	10.00	138.68	0.03	14.50	0.00	0.00	
3+640	14.63	0.00	1.50	0.00	0.00	10.00	146.30	0.03	15.00	0.00	0.00	
3+650	15.09	0.00	1.50	0.00	0.00	10.00	150.93	0.00	15.00	0.00	0.00	
3+660	14.12	0.00	1.40	0.00	0.00	10.00	141.23	0.00	14.00	0.00	0.00	
3+670	2.98	0.19	1.18	0.00	0.00	10.00	29.83	1.85	11.75	0.00	0.00	
3+680	0.55	0.89	0.70	4.03	0.66	10.00	5.50	8.85	7.00	40.30	6.63	
3+690	3.78	3.40	0.75	2.91	0.28	10.00	37.75	33.95	7.50	29.08	2.75	
3+700	4.17	4.21	0.70	2.74	0.24	10.00	41.68	42.08	7.00	27.38	2.40	
3+710	2.18	4.37	0.75	1.42	0.01	10.00	21.83	43.70	7.50	14.20	0.10	
3+720	0.00	5.19	0.00	4.02	0.28	10.00	0.00	51.88	0.00	40.18	2.80	
3+730	0.00	5.18	0.00	3.52	0.19	10.00	0.00	51.83	0.00	35.23	1.90	
3+740	2.06	0.19	1.45	0.00	0.00	10.00	20.58	1.85	14.50	0.00	0.00	
3+750	7.94	0.00	1.40	0.00	0.00	10.00	79.43	0.00	14.00	0.00	0.00	
3+760	8.43	0.00	1.50	0.00	0.00	10.00	84.33	0.00	15.00	0.00	0.00	
3+770	8.24	0.00	1.45	0.00	0.00	10.00	82.38	0.00	14.50	0.00	0.00	
3+780	5.55	0.01	1.45	0.00	0.00	10.00	55.50	0.08	14.45	0.00	0.00	
3+790	5.40	0.00	1.50	0.00	0.00	10.00	53.95	0.00	15.00	0.00	0.00	
3+800	2.68	0.16	1.13	0.00	0.00	10.00	26.75	1.55	11.30	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
3+810	1.28	0.18	1.13	0.00	0.00	10.00	12.80	1.80	11.25	0.00	0.00	
3+820	1.49	0.45	1.30	0.00	0.00	10.00	14.93	4.45	12.98	0.00	0.00	
3+830	2.36	5.10	0.75	0.00	0.00	10.00	23.60	51.03	7.50	0.00	0.00	
3+840	0.00	6.77	0.43	0.00	0.00	10.00	0.00	67.70	4.25	0.00	0.00	
3+850	0.00	5.33	0.00	0.00	0.00	10.00	0.00	53.33	0.00	0.00	0.00	
3+860	1.26	0.08	1.21	0.00	0.00	10.00	12.60	0.75	12.13	0.00	0.00	
3+870	7.63	0.00	1.45	0.00	0.00	10.00	76.25	0.00	14.50	0.00	0.00	
3+880	14.37	0.00	1.40	0.00	0.00	10.00	143.70	0.00	14.00	0.00	0.00	
3+890	8.87	0.00	1.40	0.00	0.00	10.00	88.65	0.00	14.00	0.00	0.00	
3+900	1.48	0.21	1.27	0.00	0.00	10.00	14.78	2.10	12.70	0.00	0.00	
3+910	0.00	3.98	0.41	1.97	0.12	10.00	0.00	39.78	4.05	19.70	1.23	
3+920	0.00	5.56	0.00	1.42	0.00	10.00	0.00	55.58	0.00	14.18	0.00	
3+930	0.00	5.80	0.00	1.60	0.00	10.00	0.00	58.00	0.00	16.00	0.00	
3+940	0.00	6.90	0.00	2.49	0.03	10.00	0.00	69.03	0.00	24.85	0.28	
3+950	0.00	6.98	0.00	2.23	0.09	10.00	0.00	69.75	0.00	22.28	0.88	
3+960	0.01	2.88	0.54	3.13	0.33	10.00	0.10	28.78	5.38	31.30	3.30	
3+970	4.31	0.08	0.75	2.04	0.21	10.00	43.05	0.80	7.50	20.40	2.13	
3+980	13.55	0.00	1.45	0.00	0.00	10.00	135.45	0.00	14.50	0.00	0.00	
3+990	26.53	0.00	1.45	0.00	0.00	10.00	265.25	0.00	14.50	0.00	0.00	
4+000	30.66	0.00	1.45	0.00	0.00	10.00	306.55	0.00	14.50	0.00	0.00	
4+010	25.01	0.00	1.45	0.00	0.00	10.00	250.10	0.03	14.50	0.00	0.00	
4+020	17.14	0.00	0.75	0.00	0.00	10.00	171.38	0.00	7.50	0.00	0.00	
4+030	8.51	0.02	0.75	2.13	0.27	10.00	85.13	0.20	7.50	21.28	2.70	
4+040	6.60	0.56	0.75	3.73	0.56	10.00	65.98	5.58	7.50	37.30	5.60	
4+050	14.71	0.00	0.70	0.00	0.00	10.00	147.05	0.00	7.00	0.00	0.00	
4+060	18.66	0.00	0.75	2.91	0.35	10.00	186.58	0.00	7.50	29.08	3.45	
4+070	17.94	0.00	0.70	0.00	0.00	10.00	179.43	0.00	7.00	0.00	0.00	
4+080	11.58	0.00	0.75	0.00	0.00	10.00	115.78	0.00	7.50	0.00	0.00	
4+090	10.31	0.12	0.75	0.00	0.00	10.00	103.05	1.20	7.50	0.00	0.00	
4+100	11.13	0.00	0.70	0.00	0.00	10.00	111.30	0.00	7.00	0.00	0.00	
4+110	16.58	0.00	1.50	0.00	0.00	10.00	165.80	0.00	15.00	0.00	0.00	
4+120	30.05	0.00	1.45	0.00	0.00	10.00	300.53	0.00	14.50	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
4+130	53.83	0.00	1.40	0.00	0.00	10.00	538.30	0.00	14.00	0.00	0.00	
4+140	64.28	0.00	1.50	0.00	0.00	10.00	642.83	0.00	15.00	0.00	0.00	
4+150	46.16	0.00	1.45	0.00	0.00	10.00	461.58	0.00	14.50	0.00	0.00	
4+160	45.03	0.00	1.45	0.00	0.00	10.00	450.30	0.00	14.50	0.00	0.00	
4+170	30.33	0.00	1.40	0.00	0.00	10.00	303.30	0.00	14.00	0.00	0.00	
4+180	22.49	0.00	1.16	0.00	0.00	10.00	224.90	0.00	11.63	0.00	0.00	
4+190	20.30	0.00	1.45	0.00	0.00	10.00	203.00	0.00	14.50	0.00	0.00	
4+200	10.83	0.00	1.50	0.00	0.00	10.00	108.25	0.00	15.00	0.00	0.00	
4+210	3.37	1.64	0.70	1.71	0.06	10.00	33.73	16.35	7.00	17.05	0.55	
4+220	3.42	3.65	0.70	1.05	0.00	10.00	34.15	36.50	7.00	10.50	0.00	
4+230	2.73	2.99	0.75	1.66	0.06	10.00	27.30	29.93	7.50	16.60	0.55	
4+240	5.80	1.43	0.70	1.68	0.10	10.00	58.03	14.33	7.00	16.75	1.00	
4+250	5.32	0.02	0.75	0.00	0.00	10.00	53.18	0.18	7.50	0.00	0.00	
4+260	18.69	0.00	1.45	0.00	0.00	10.00	186.88	0.00	14.50	0.00	0.00	
4+270	16.03	0.00	1.45	0.00	0.00	10.00	160.28	0.00	14.50	0.00	0.00	
4+280	13.42	0.00	1.45	0.00	0.00	10.00	134.20	0.00	14.50	0.00	0.00	
4+290	8.88	0.00	1.45	0.00	0.00	10.00	88.83	0.03	14.50	0.00	0.00	
4+300	2.54	0.07	1.40	0.00	0.00	10.00	25.40	0.68	14.00	0.00	0.00	
4+310	0.19	0.56	0.23	0.00	0.00	10.00	1.85	5.63	2.25	0.00	0.00	
4+320	0.00	1.34	0.00	0.75	0.00	10.00	0.00	13.40	0.00	7.50	0.00	
4+330	0.00	1.62	0.00	0.38	0.00	10.00	0.00	16.20	0.00	3.78	0.00	
4+340	0.31	0.72	0.37	0.00	0.00	10.00	3.13	7.23	3.70	0.00	0.00	
4+350	0.37	0.46	0.00	1.41	0.00	9.33	3.47	4.31	0.02	13.17	0.00	
4+360	2.08	0.00	0.70	0.97	0.00	4.33	9.00	0.00	3.03	4.17	0.00	
4+370	1.96	0.00	0.72	0.00	0.00	10.00	19.63	0.03	7.23	0.00	0.00	
4+380	1.07	0.14	0.94	0.00	0.00	10.00	10.73	1.38	9.35	0.00	0.00	
4+390	1.78	0.13	0.88	0.00	0.00	10.00	17.80	1.25	8.80	0.00	0.00	
4+400	13.49	0.00	0.94	0.00	0.00	10.00	134.93	0.03	9.35	0.00	0.00	
4+410	36.82	0.30	0.94	4.15	0.72	10.00	368.20	2.98	9.35	41.48	7.15	
4+420	11.94	1.20	0.88	3.71	0.53	10.00	119.43	11.98	8.80	37.05	5.33	
4+430	9.63	1.24	0.88	2.97	0.34	10.00	96.30	12.35	8.80	29.68	3.35	
4+440	4.64	1.16	0.88	3.36	0.41	10.00	46.38	11.58	8.80	33.58	4.13	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
4+450	4.58	0.86	0.94	1.37	0.01	10.00	45.78	8.58	9.35	13.65	0.13	
4+460	8.58	0.03	0.94	2.44	0.32	10.00	85.80	0.30	9.35	24.35	3.15	
4+470	5.07	0.22	0.88	1.50	0.12	10.00	50.70	2.18	8.80	14.95	1.15	
4+480	3.93	1.19	0.94	0.83	0.00	10.00	39.30	11.90	9.35	8.25	0.00	
4+490	4.13	1.08	0.94	3.29	0.43	10.00	41.30	10.83	9.35	32.88	4.30	
4+500	9.49	0.23	0.94	1.69	0.14	10.00	94.93	2.33	9.35	16.85	1.40	
4+510	22.93	0.75	0.88	1.39	0.04	10.00	229.33	7.50	8.80	13.90	0.38	
4+520	9.01	0.00	0.94	2.28	0.28	10.00	90.05	0.00	9.35	22.78	2.75	
4+530	3.11	0.59	0.94	1.25	0.03	10.00	31.05	5.85	9.35	12.50	0.33	
4+540	3.00	0.64	0.94	1.16	0.02	10.00	29.95	6.35	9.35	11.63	0.15	
4+550	5.49	0.49	0.94	3.40	0.54	10.00	54.90	4.85	9.35	34.00	5.35	
4+560	4.33	0.97	0.88	3.12	0.41	10.00	43.25	9.73	8.80	31.15	4.05	
4+570	6.69	0.48	0.88	3.58	0.57	10.00	66.90	4.80	8.80	35.80	5.70	
4+580	7.61	1.19	0.88	3.09	0.36	10.00	76.05	11.93	8.80	30.85	3.60	
4+590	4.29	1.61	0.94	5.40	0.97	10.00	42.88	16.10	9.35	54.00	9.68	
4+600	8.91	0.97	0.94	0.00	0.00	10.00	89.05	9.70	9.35	0.00	0.00	
4+610	12.88	0.76	0.94	0.00	0.00	10.00	128.78	7.63	9.35	0.00	0.00	
4+620	4.48	1.32	0.94	0.97	0.00	10.00	44.75	13.18	9.35	9.70	0.00	
4+630	3.77	1.33	0.88	3.27	0.40	10.00	37.65	13.28	8.80	32.70	4.03	
4+640	9.62	0.33	0.88	1.67	0.14	10.00	96.18	3.25	8.80	16.70	1.43	
4+650	7.46	0.10	0.88	0.00	0.00	10.00	74.55	1.03	8.80	0.00	0.00	
4+660	9.81	0.70	0.88	2.97	0.45	10.00	98.13	7.03	8.80	29.68	4.53	
4+670	31.74	0.00	0.88	0.00	0.00	10.00	317.35	0.03	8.80	0.00	0.00	
4+680	35.07	3.18	0.88	0.00	0.00	10.00	350.65	31.80	8.80	0.00	0.00	
4+690	30.53	2.76	0.88	0.00	0.00	10.00	305.30	27.58	8.80	0.00	0.00	
4+700	17.31	0.07	0.88	0.00	0.00	10.00	173.08	0.68	8.80	0.00	0.00	
4+710	21.82	0.00	0.94	0.00	0.00	10.00	218.15	0.00	9.35	0.00	0.00	
4+720	24.83	0.00	0.88	0.00	0.00	10.00	248.30	0.00	8.80	0.00	0.00	
4+730	8.81	0.00	0.94	0.00	0.00	10.00	88.08	0.00	9.35	0.00	0.00	
4+740	2.60	0.06	0.88	0.00	0.00	10.00	26.00	0.60	8.80	0.00	0.00	
4+750	8.54	0.00	0.94	0.00	0.00	10.00	85.43	0.00	9.35	0.00	0.00	
4+760	8.25	0.00	0.88	0.00	0.00	10.00	82.45	0.00	8.80	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
4+770	3.37	0.06	0.94	0.00	0.00	10.00	33.70	0.60	9.35	0.00	0.00	
4+780	1.69	0.06	0.76	0.00	0.00	10.00	16.93	0.58	7.55	0.00	0.00	
4+790	3.00	0.83	0.94	0.00	0.00	10.00	30.00	8.30	9.35	0.00	0.00	
4+800	7.65	0.00	0.88	0.00	0.00	10.00	76.50	0.00	8.80	0.00	0.00	
4+810	12.39	0.00	1.82	0.00	0.00	10.00	123.93	0.00	18.15	0.00	0.00	
4+820	7.29	0.00	0.94	0.00	0.00	10.00	72.88	0.00	9.35	0.00	0.00	
4+830	0.29	3.15	0.88	2.59	0.21	10.00	2.90	31.53	8.80	25.85	2.05	
4+840	1.00	1.80	0.81	2.45	0.23	10.00	10.03	18.00	8.05	24.53	2.25	
4+850	0.00	2.53	0.33	2.97	0.31	10.00	0.00	25.28	3.28	29.73	3.08	
4+860	0.49	0.94	0.50	1.58	0.07	10.00	4.90	9.35	4.95	15.80	0.70	
4+870	2.18	0.07	0.87	0.00	0.00	10.00	21.83	0.70	8.73	0.00	0.00	
4+880	3.74	0.01	0.94	0.00	0.00	10.00	37.38	0.05	9.35	0.00	0.00	
4+890	4.47	0.06	0.94	0.00	0.00	10.00	44.65	0.60	9.35	0.00	0.00	
4+900	3.23	1.23	0.94	0.00	0.00	10.00	32.33	12.33	9.35	0.00	0.00	
4+910	1.01	2.12	0.94	1.25	0.02	10.00	10.08	21.15	9.35	12.45	0.20	
4+920	5.21	1.24	0.88	3.59	0.58	10.00	52.05	12.35	8.80	35.85	5.80	
4+930	8.03	0.59	0.88	1.98	0.17	10.00	80.33	5.93	8.80	19.78	1.65	
4+940	18.80	0.86	0.94	2.81	0.36	10.00	188.00	8.55	9.35	28.13	3.63	
4+950	8.01	4.68	0.88	3.55	0.41	10.00	80.05	46.78	8.80	35.48	4.13	
4+960	7.67	2.14	0.94	3.86	0.55	10.00	76.70	21.40	9.35	38.63	5.50	
4+970	14.97	0.00	1.87	0.00	0.00	10.00	149.73	0.03	18.70	0.00	0.00	
4+980	24.76	0.00	1.82	0.00	0.00	10.00	247.58	0.00	18.15	0.00	0.00	
4+990	17.46	0.00	1.87	0.00	0.00	10.00	174.60	0.00	18.70	0.00	0.00	
5+000	7.69	0.18	0.88	0.00	0.00	10.00	76.93	1.80	8.80	0.00	0.00	
5+010	6.54	0.00	0.94	0.00	0.00	10.00	65.38	0.00	9.35	0.00	0.00	
5+020	1.30	0.34	0.66	0.00	0.00	10.00	12.98	3.43	6.60	0.00	0.00	
5+030	1.21	1.10	0.70	2.77	0.36	10.00	12.13	10.98	6.98	27.73	3.58	
5+040	0.57	1.09	0.86	2.96	0.41	10.00	5.70	10.85	8.55	29.63	4.13	
5+050	1.63	1.24	0.94	3.32	0.50	10.00	16.33	12.40	9.35	33.20	4.98	
5+060	4.75	0.26	0.94	1.25	0.10	10.00	47.50	2.63	9.35	12.53	0.95	
5+070	9.27	0.25	0.88	1.42	0.11	10.00	92.68	2.48	8.80	14.20	1.08	
5+080	8.20	0.21	0.94	1.67	0.15	10.00	81.95	2.08	9.35	16.70	1.48	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
5+090	7.45	1.25	0.94	0.00	0.00	10.00	74.45	12.53	9.35	0.00	0.00	
5+100	7.76	0.89	0.94	0.00	0.00	10.00	77.63	8.93	9.35	0.00	0.00	
5+110	11.31	0.07	0.94	0.00	0.00	10.00	113.13	0.73	9.35	0.00	0.00	
5+120	8.63	0.15	0.94	0.00	0.00	10.00	86.25	1.53	9.35	0.00	0.00	
5+130	33.06	0.41	0.88	0.00	0.00	10.00	330.63	4.10	8.80	0.00	0.00	
5+140	8.06	0.48	0.94	0.00	0.00	10.00	80.58	4.78	9.35	0.00	0.00	
5+150	7.55	1.08	0.88	6.12	1.24	10.00	75.45	10.75	8.80	61.15	12.38	
5+160	7.82	1.43	0.94	5.64	1.07	10.00	78.23	14.33	9.35	56.35	10.70	
5+170	4.97	0.85	0.88	6.10	1.31	10.00	49.70	8.45	8.80	60.98	13.05	
5+180	6.09	1.84	0.94	4.68	0.80	10.00	60.90	18.43	9.35	46.78	7.95	
5+190	7.81	2.97	0.88	11.48	2.82	10.00	78.05	29.68	8.80	114.83	28.18	
5+200	6.04	0.00	0.94	0.00	0.00	10.00	60.35	0.00	9.35	0.00	0.00	
5+210	13.79	0.00	0.94	2.97	0.38	10.00	137.93	0.03	9.35	29.68	3.80	
5+220	19.24	0.50	0.88	4.88	0.92	10.00	192.35	4.95	8.80	48.80	9.20	
5+230	15.54	0.00	0.94	6.37	1.18	10.00	155.35	0.00	9.35	63.68	11.75	
5+240	19.36	0.00	0.94	9.40	2.36	10.00	193.55	0.00	9.35	93.98	23.60	
5+250	26.19	0.01	0.94	9.27	2.28	10.00	261.90	0.05	9.35	92.65	22.80	
5+260	23.76	0.12	0.88	4.42	0.87	10.00	237.55	1.15	8.80	44.20	8.65	
5+270	50.75	0.00	1.76	0.00	0.00	10.00	507.45	0.00	17.60	0.00	0.00	
5+280	74.65	0.00	1.80	21.82	3.06	10.00	746.48	0.00	17.98	218.20	30.60	
5+290	47.06	0.00	1.80	16.44	3.02	10.00	470.60	0.00	17.98	164.38	30.15	
5+300	14.11	0.24	0.94	0.00	0.00	10.00	141.10	2.38	9.35	0.00	0.00	
5+310	5.88	2.49	0.94	1.18	0.04	10.00	58.75	24.93	9.35	11.80	0.43	
5+320	13.07	0.36	0.88	1.03	0.03	10.00	130.65	3.60	8.80	10.28	0.33	
5+330	13.27	2.63	0.88	3.79	0.50	10.00	132.73	26.33	8.80	37.88	5.00	
5+340	5.18	9.14	0.94	6.09	0.90	10.00	51.75	91.35	9.35	60.88	8.98	
5+350	5.19	0.61	0.88	3.34	0.45	10.00	51.88	6.05	8.80	33.38	4.50	
5+360	4.18	0.10	0.00	0.00	0.00	10.00	41.80	1.03	0.00	0.00	0.00	
5+370	21.77	0.48	0.94	3.82	0.62	10.00	217.68	4.83	9.35	38.15	6.18	
5+380	14.25	2.23	0.94	3.34	0.35	10.00	142.53	22.25	9.35	33.40	3.48	
5+390	9.34	0.42	0.94	3.47	0.55	10.00	93.43	4.15	9.35	34.65	5.45	
5+400	12.32	3.46	0.88	6.12	1.10	10.00	123.20	34.58	8.80	61.15	11.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
5+410	25.73	0.00	1.87	0.00	0.00	10.00	257.33	0.00	18.70	0.00	0.00	
5+420	72.10	0.00	1.80	17.99	8.09	10.00	721.03	0.00	17.95	179.93	80.88	
5+430	102.13	0.01	1.82	20.59	9.58	10.00	1021.30	0.08	18.15	205.88	95.83	
5+440	67.37	0.00	1.87	18.99	9.03	10.00	673.70	0.00	18.70	189.93	90.30	
5+450	21.48	0.45	0.92	12.20	5.20	10.00	214.80	4.48	9.15	121.98	52.00	
5+460	15.84	0.83	0.92	12.97	4.86	10.00	158.43	8.25	9.15	129.70	48.58	
5+470	10.41	1.01	0.88	1.80	0.10	10.00	104.10	10.13	8.80	17.98	1.00	
5+480	9.21	0.04	0.94	1.84	0.22	10.00	92.05	0.40	9.35	18.40	2.23	
5+490	4.56	0.37	0.94	0.91	0.08	10.00	45.60	3.65	9.35	9.05	0.78	
5+500	5.16	0.50	0.94	0.63	0.01	10.00	51.60	4.95	9.35	6.33	0.08	
5+510	5.90	4.82	0.94	5.17	0.91	10.00	58.95	48.20	9.35	51.73	9.13	
5+520	4.91	6.06	0.88	4.40	0.65	10.00	49.13	60.58	8.80	44.03	6.45	
5+530	5.89	2.40	0.94	3.78	0.56	10.00	58.93	24.03	9.35	37.80	5.55	
5+540	6.99	3.18	0.88	3.14	0.41	10.00	69.90	31.75	8.80	31.35	4.05	
5+550	9.88	0.00	0.88	0.00	0.00	10.00	98.80	0.00	8.80	0.00	0.00	
5+560	3.10	0.01	0.94	0.00	0.00	10.00	30.95	0.13	9.35	0.00	0.00	
5+570	3.61	0.60	0.94	0.00	0.00	10.00	36.05	5.98	9.35	0.00	0.00	
5+580	6.03	0.75	0.88	1.57	0.05	10.00	60.33	7.45	8.80	15.70	0.53	
5+590	6.11	1.39	0.94	2.88	0.31	10.00	61.08	13.88	9.35	28.78	3.05	
5+600	10.23	0.26	0.94	1.52	0.14	10.00	102.33	2.55	9.35	15.18	1.35	
Total							49,480.83	10,962.49	4,916.48	6,396.07	1,020.38	
Soil Type: Hard Rock												
5+610	5.52	3.09	0.88	1.04	0.00	10.00	55.23	30.88	8.80	10.38	0.00	
5+620	1.97	6.16	0.94	4.19	0.67	10.00	19.73	61.60	9.35	41.93	6.73	
5+630	2.88	8.50	0.88	2.44	0.25	10.00	28.83	85.00	8.80	24.43	2.45	
5+640	0.00	14.81	0.02	4.04	0.48	10.00	0.00	148.08	0.20	40.38	4.80	
5+650	24.26	6.27	0.94	8.83	2.00	10.00	242.60	62.73	9.35	88.28	20.00	
5+660	31.71	2.48	0.94	6.21	1.38	10.00	317.05	24.75	9.35	62.10	13.80	
5+670	30.63	1.04	0.94	5.05	1.03	10.00	306.28	10.43	9.35	50.50	10.33	
5+680	41.49	0.00	0.94	0.00	0.00	10.00	414.90	0.03	9.35	0.00	0.00	
5+690	53.77	0.00	1.76	0.00	0.00	10.00	537.73	0.03	17.60	0.00	0.00	
5+700	55.97	0.00	0.88	0.00	0.00	10.00	559.70	0.00	8.80	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
5+710	62.47	0.00	0.86	16.71	3.05	10.00	624.68	0.03	8.63	167.10	30.53	
5+720	63.56	0.00	0.86	18.52	3.07	10.00	635.63	0.00	8.60	185.15	30.68	
5+730	44.31	0.00	0.92	10.37	3.04	10.00	443.10	0.00	9.15	103.73	30.35	
5+740	14.04	1.71	0.88	1.72	0.15	10.00	140.38	17.05	8.80	17.20	1.53	
5+750	34.34	3.71	0.94	2.52	0.39	10.00	343.38	37.05	9.35	25.20	3.90	
5+760	10.56	7.24	0.88	4.74	0.85	10.00	105.58	72.40	8.80	47.38	8.45	
5+770	5.36	9.75	0.94	5.07	0.74	10.00	53.60	97.50	9.35	50.70	7.35	
5+780	15.27	1.91	0.88	1.23	0.00	10.00	152.68	19.05	8.80	12.25	0.00	
5+790	9.09	0.99	0.94	2.00	0.34	10.00	90.85	9.88	9.35	20.03	3.40	
5+800	15.21	1.11	0.94	4.84	1.01	10.00	152.05	11.10	9.35	48.35	10.08	
5+810	11.34	0.82	0.88	2.36	0.37	10.00	113.35	8.20	8.80	23.60	3.68	
5+820	3.23	2.27	0.94	2.77	0.51	10.00	32.25	22.70	9.35	27.73	5.10	
5+830	4.24	1.55	0.94	4.31	0.83	10.00	42.40	15.45	9.35	43.10	8.25	
5+840	23.09	2.28	0.94	9.28	2.99	10.00	230.90	22.83	9.35	92.83	29.88	
5+850	24.26	0.73	0.94	12.86	4.54	10.00	242.58	7.30	9.35	128.63	45.40	
5+860	8.74	2.35	0.94	11.14	3.29	10.00	87.38	23.53	9.35	111.38	32.93	
5+870	0.39	5.17	0.88	3.54	0.37	10.00	3.85	51.65	8.78	35.35	3.70	
5+880	1.96	4.71	0.93	3.52	0.37	10.00	19.58	47.08	9.33	35.23	3.65	
5+890	6.64	5.85	0.94	10.28	2.10	10.00	66.40	58.48	9.35	102.83	20.98	
5+900	8.11	5.36	0.88	8.18	1.83	10.00	81.13	53.55	8.80	81.80	18.33	
5+910	17.29	2.11	0.94	6.77	1.58	10.00	172.90	21.08	9.35	67.73	15.75	
5+920	26.18	1.58	0.94	3.90	0.74	10.00	261.83	15.80	9.35	38.95	7.40	
5+930	8.72	3.68	0.94	5.04	1.01	10.00	87.15	36.78	9.35	50.40	10.08	
5+940	10.60	1.88	0.94	3.93	0.66	10.00	105.98	18.75	9.35	39.30	6.55	
5+950	0.66	3.62	0.88	3.25	0.53	10.00	6.60	36.15	8.80	32.53	5.33	
5+960	18.33	0.00	0.94	2.14	0.26	10.00	183.30	0.00	9.35	21.35	2.60	
5+970	53.01	1.21	0.94	5.01	1.04	10.00	530.13	12.10	9.35	50.10	10.38	
5+980	28.85	5.02	0.94	4.45	0.79	10.00	288.50	50.15	9.35	44.48	7.88	
5+990	19.26	0.49	0.94	3.70	0.56	10.00	192.63	4.88	9.35	36.98	5.55	
6+000	45.91	0.00	0.94	0.00	0.00	10.00	459.10	0.00	9.35	0.00	0.00	
6+010	64.84	0.12	0.88	0.00	0.00	10.00	648.40	1.23	8.80	0.00	0.00	
6+020	55.58	1.86	0.94	7.40	1.73	10.00	555.80	18.63	9.35	74.00	17.25	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
6+030	41.70	0.08	0.94	3.91	0.84	10.00	417.00	0.78	9.35	39.13	8.43	
6+040	28.75	0.60	0.94	3.22	0.48	10.00	287.50	5.95	9.35	32.23	4.75	
6+050	22.81	0.00	0.94	5.14	1.05	10.00	228.13	0.00	9.35	51.35	10.48	
6+060	29.12	0.00	0.94	0.00	0.00	10.00	291.18	0.00	9.35	0.00	0.00	
6+070	33.89	0.00	0.88	0.00	0.00	10.00	338.90	0.00	8.80	0.00	0.00	
6+080	17.13	0.00	0.88	0.00	0.00	10.00	171.25	0.00	8.80	0.00	0.00	
6+090	10.25	3.07	0.94	7.60	2.38	10.00	102.50	30.70	9.35	76.03	23.75	
6+100	7.47	1.05	0.94	5.09	1.08	10.00	74.65	10.48	9.35	50.88	10.80	
6+110	13.07	0.80	0.88	4.74	1.16	10.00	130.73	8.03	8.80	47.40	11.55	
6+120	5.71	1.72	0.94	5.49	1.24	10.00	57.10	17.18	9.35	54.85	12.35	
6+130	4.50	5.19	0.94	5.94	1.14	10.00	44.95	51.85	9.35	59.38	11.40	
6+140	20.03	6.74	0.88	8.86	1.71	10.00	200.25	67.35	8.80	88.63	17.08	
6+150	44.97	3.04	0.88	10.83	2.77	10.00	449.70	30.40	8.80	108.28	27.73	
6+160	47.97	1.76	0.88	3.31	0.71	10.00	479.68	17.63	8.80	33.05	7.05	
6+170	5.76	11.11	0.94	5.06	1.05	10.00	57.63	111.13	9.35	50.60	10.53	
6+180	1.71	16.96	0.89	2.65	0.32	10.00	17.05	169.55	8.85	26.48	3.15	
6+190	0.00	9.28	0.37	5.63	1.23	10.00	0.00	92.80	3.65	56.28	12.30	
6+200	4.85	6.33	0.88	5.82	1.39	10.00	48.48	63.25	8.80	58.15	13.90	
6+210	1.48	9.27	0.94	2.87	0.57	10.00	14.83	92.65	9.35	28.65	5.65	
6+220	10.22	4.98	0.94	7.70	1.81	10.00	102.18	49.75	9.35	77.03	18.13	
6+230	13.46	5.82	0.86	20.88	4.23	10.00	134.60	58.18	8.63	208.80	42.30	
6+240	30.72	0.08	0.92	26.26	4.74	10.00	307.23	0.78	9.15	262.63	47.40	
6+250	26.96	0.00	0.86	26.25	4.80	10.00	269.60	0.00	8.63	262.53	47.98	
6+260	12.78	0.81	0.88	1.82	0.35	10.00	127.75	8.05	8.80	18.23	3.50	
6+270	36.02	1.64	0.92	34.28	7.66	10.00	360.18	16.35	9.15	342.78	76.55	
6+280	74.47	1.60	0.86	41.27	5.81	10.00	744.65	16.03	8.63	412.68	58.08	
6+290	40.21	4.85	0.92	32.78	4.92	10.00	402.08	48.53	9.15	327.75	49.20	
6+300	24.36	2.85	0.86	25.24	5.41	10.00	243.58	28.48	8.63	252.35	54.13	
6+310	38.87	3.64	0.92	24.72	4.63	10.00	388.65	36.43	9.15	247.23	46.30	
6+320	31.17	5.03	0.88	1.69	0.25	10.00	311.73	50.25	8.80	16.90	2.50	
6+330	25.03	0.26	0.88	6.74	1.68	10.00	250.30	2.63	8.80	67.40	16.80	
6+340	47.75	0.01	0.86	28.42	4.26	10.00	477.50	0.08	8.63	284.15	42.55	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
6+350	38.80	0.00	0.92	41.45	8.57	5.50	213.41	0.00	5.03	227.96	47.12	
6+360	24.56	0.02	0.00	0.00	0.00	10.00	245.58	0.23	0.00	0.00	0.00	
6+370	44.80	0.00	0.00	0.00	0.00	10.00	447.98	0.00	0.00	0.00	0.00	
6+380	98.57	0.00	0.00	0.00	0.00	10.00	985.70	0.00	0.00	0.00	0.00	
6+390	37.15	0.00	0.00	0.00	0.00	10.00	371.53	0.00	0.00	0.00	0.00	
6+400	18.30	0.03	0.00	0.00	0.00	10.00	183.03	0.25	0.00	0.00	0.00	
6+410	17.66	0.00	0.00	0.00	0.00	10.00	176.60	0.00	0.00	0.00	0.00	
6+420	32.85	0.00	0.00	0.00	0.00	10.00	328.50	0.00	0.00	0.00	0.00	
6+430	28.46	0.45	0.00	0.00	0.00	10.00	284.55	4.50	0.00	0.00	0.00	
6+440	60.40	0.00	0.00	0.00	0.00	10.00	604.00	0.00	0.00	0.00	0.00	
6+450	72.63	0.00	0.00	0.00	0.00	10.00	726.25	0.00	0.00	0.00	0.00	
6+460	65.32	0.00	0.00	0.00	0.00	10.00	653.23	0.03	0.00	0.00	0.00	
6+470	57.59	0.00	0.00	0.00	0.00	10.00	575.85	0.00	0.00	0.00	0.00	
6+480	45.52	0.00	0.00	0.00	0.00	10.00	455.23	0.00	0.00	0.00	0.00	
6+490	47.67	0.00	0.00	0.00	0.00	10.00	476.70	0.00	0.00	0.00	0.00	
6+500	32.82	0.27	0.00	0.00	0.00	10.00	328.23	2.65	0.00	0.00	0.00	
6+510	39.29	0.02	0.00	0.00	0.00	10.00	392.88	0.23	0.00	0.00	0.00	
6+520	25.40	0.00	0.00	0.00	0.00	10.00	254.03	0.00	0.00	0.00	0.00	
6+530	14.06	0.30	0.00	0.00	0.00	10.00	140.58	2.95	0.00	0.00	0.00	
6+540	24.86	0.00	0.00	0.00	0.00	10.00	248.63	0.00	0.00	0.00	0.00	
6+550	15.13	0.00	0.00	0.00	0.00	10.00	151.33	0.00	0.00	0.00	0.00	
6+560	20.70	0.00	0.00	0.00	0.00	10.00	207.00	0.00	0.00	0.00	0.00	
6+570	11.82	0.00	0.00	0.00	0.00	10.00	118.23	0.00	0.00	0.00	0.00	
6+580	21.70	0.00	0.00	0.00	0.00	10.00	216.95	0.00	0.00	0.00	0.00	
6+590	31.19	0.00	0.00	0.00	0.00	10.00	311.85	0.00	0.00	0.00	0.00	
6+600	20.88	0.00	0.00	0.00	0.00	10.00	208.83	0.00	0.00	0.00	0.00	
6+610	27.23	0.04	0.00	0.00	0.00	10.00	272.30	0.38	0.00	0.00	0.00	
6+620	18.50	0.74	0.00	0.00	0.00	10.00	185.03	7.43	0.00	0.00	0.00	
6+630	31.62	0.00	0.00	0.00	0.00	10.00	316.20	0.00	0.00	0.00	0.00	
6+640	39.34	0.00	0.00	0.00	0.00	10.00	393.38	0.00	0.00	0.00	0.00	
6+650	36.22	0.00	0.00	0.00	0.00	10.00	362.15	0.00	0.00	0.00	0.00	
6+660	73.28	0.00	0.00	0.00	0.00	10.00	732.78	0.03	0.00	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
6+670	53.35	0.00	0.00	0.00	0.00	10.00	533.53	0.00	0.00	0.00	0.00	
6+680	63.06	0.00	0.00	0.00	0.00	10.00	630.58	0.00	0.00	0.00	0.00	
6+690	44.48	0.00	0.00	0.00	0.00	10.00	444.75	0.00	0.00	0.00	0.00	
6+700	36.62	0.00	0.00	0.00	0.00	10.00	366.23	0.00	0.00	0.00	0.00	
6+710	20.20	0.20	0.00	0.00	0.00	10.00	202.00	1.95	0.00	0.00	0.00	
6+720	65.74	0.84	0.00	0.00	0.00	10.00	657.38	8.38	0.00	0.00	0.00	
6+730	75.48	0.00	0.00	0.00	0.00	10.00	754.83	0.00	0.00	0.00	0.00	
6+740	28.41	0.00	0.00	0.00	0.00	10.00	284.13	0.00	0.00	0.00	0.00	
6+750	15.77	0.00	0.00	0.00	0.00	10.00	157.65	0.00	0.00	0.00	0.00	
6+760	14.67	0.00	0.00	0.00	0.00	10.00	146.73	0.00	0.00	0.00	0.00	
6+770	22.29	0.00	0.00	0.00	0.00	10.00	222.88	0.00	0.00	0.00	0.00	
6+780	127.64	0.00	0.00	0.00	0.00	10.00	1276.43	0.00	0.00	0.00	0.00	
6+790	129.56	0.00	0.00	0.00	0.00	10.00	1295.58	0.00	0.00	0.00	0.00	
6+800	52.47	0.00	0.00	0.00	0.00	10.00	524.73	0.00	0.00	0.00	0.00	
6+810	22.03	2.48	0.00	0.00	0.00	10.00	220.30	24.83	0.00	0.00	0.00	
6+820	35.87	0.00	0.00	0.00	0.00	10.00	358.73	0.00	0.00	0.00	0.00	
6+830	17.70	0.00	0.00	0.00	0.00	10.00	177.00	0.03	0.00	0.00	0.00	
6+840	41.39	0.00	0.00	0.00	0.00	10.00	413.90	0.00	0.00	0.00	0.00	
6+850	37.01	0.02	0.00	0.00	0.00	10.00	370.05	0.20	0.00	0.00	0.00	
6+860	70.85	2.48	0.00	0.00	0.00	10.00	708.53	24.75	0.00	0.00	0.00	
6+870	85.34	0.00	0.00	0.00	0.00	10.00	853.35	0.00	0.00	0.00	0.00	
6+880	69.48	0.00	0.00	0.00	0.00	10.00	694.78	0.00	0.00	0.00	0.00	
6+890	98.91	0.00	0.00	0.00	0.00	10.00	989.05	0.00	0.00	0.00	0.00	
6+900	57.25	0.00	0.00	0.00	0.00	10.00	572.45	0.00	0.00	0.00	0.00	
6+910	34.51	0.00	0.00	0.00	0.00	10.00	345.13	0.00	0.00	0.00	0.00	
6+920	18.43	0.00	0.00	0.00	0.00	10.00	184.28	0.00	0.00	0.00	0.00	
6+930	13.93	0.00	0.00	0.00	0.00	10.00	139.28	0.00	0.00	0.00	0.00	
6+940	24.68	0.00	0.00	0.00	0.00	10.00	246.83	0.00	0.00	0.00	0.00	
6+950	21.69	0.00	0.00	0.00	0.00	10.00	216.90	0.03	0.00	0.00	0.00	
6+960	18.65	0.00	0.00	0.00	0.00	10.00	186.45	0.00	0.00	0.00	0.00	
6+970	18.87	0.00	0.00	0.00	0.00	10.00	188.73	0.00	0.00	0.00	0.00	
6+980	18.76	0.00	0.00	0.00	0.00	10.00	187.60	0.00	0.00	0.00	0.00	

Chainage	Area (m2)					Volume (m3)						Cut/Fill)
	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	Mean Dist.	Roadway Cut	Roadway Fill	Drain Cut	Structure Cut	Backfill	
6+990	18.60	0.00	0.00	0.00	0.00	10.00	185.95	0.00	0.00	0.00	0.00	
7+000	23.09	0.00	0.00	0.00	0.00	10.00	230.88	0.00	0.00	0.00	0.00	
7+010	50.70	0.00	0.00	0.00	0.00	10.00	507.03	0.00	0.00	0.00	0.00	
7+020	35.28	0.00	0.00	0.00	0.00	10.00	352.83	0.00	0.00	0.00	0.00	
7+030	31.11	0.00	0.00	0.00	0.00	10.00	311.13	0.03	0.00	0.00	0.00	
7+040	29.05	0.00	0.00	0.00	0.00	10.00	290.50	0.00	0.00	0.00	0.00	
7+050	27.87	0.00	0.00	0.00	0.00	10.00	278.73	0.00	0.00	0.00	0.00	
7+060	24.85	0.00	0.00	0.00	0.00	10.00	248.53	0.00	0.00	0.00	0.00	
7+070	27.08	0.00	0.00	0.00	0.00	10.00	270.78	0.00	0.00	0.00	0.00	
7+080	20.24	0.28	0.00	0.00	0.00	10.00	202.35	2.78	0.00	0.00	0.00	
7+090	10.13	0.14	0.00	0.00	0.00	8.56	86.66	1.18	0.00	0.00	0.00	
7+100	12.87	0.00	0.00	0.00	0.00	3.56	45.76	0.00	0.00	0.00	0.00	
Total							46,297.71	2,381.80	672.13	6,003.01	1,188.37	

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	2	0+000.00			784122.625	3119909.5	1074.077	65.556	-2	3	0		0	IP-0/X=784122.625,Y=3119909.500,R=0
0	-1.508	-3	2	0+002.74	2.74	4.13	784121.491	3119911.994	1073.823	65.556	-2	3	0	0.00	0	BC-1
0	-1.9	-3	2	0+006.66	3.92	7.45	784119.358	3119915.269	1073.46	48.2647	-2	3	0	0.00	0	IEW=1.9
0	-1.9	-3	2	0+008.63	1.97	3.74	784117.947	3119916.629	1073.278	39.6194	-2	3	0	0.00	0	IP-1/X=784118.875,Y=3119917.750,R=13
0	-1.9	-3	2	0+010.00	1.37	2.60	784116.844	3119917.448	1073.15	33.5617	-2	3	0	0.00	0	existing
0	-1.9	-3	2	0+010.59	0.59	1.12	784116.348	3119917.761	1073.096	30.9766	-2	3	0	0.00	0	IEW=1.9
0	-1.508	-3	2.123	0+014.51	3.92	5.91	784112.731	3119919.246	1072.782	13.6816	-1.713	3	0	0.00	0	EC-1
0	-0.959	-3	2.295	0+020.00	5.49	5.26	784107.397	3119920.544	1072.482	13.6816	-1.311	3	0	0.00	0	
0	0	-3	2.596	0+029.59	9.59	0.00	784098.083	3119922.812	1072.352	13.6816	-0.608	3	0	0.00	0	IEW=0
0	0	-3	2.609	0+030.00	0.41	0.00	784097.681	3119922.909	1072.358	13.6816	-0.578	3	0	0.00	0	
0	0	-3	2.923	0+040.00	10.00	0.00	784087.965	3119925.275	1072.518	13.6816	0.154	3	0	0.00	0	
0	0	-3	2.955	0+041.02	1.02	0.00	784086.97	3119925.517	1072.534	13.6816	0.229	3	0	0.00	0	rEW=0
0	0	-3	3.233	0+049.87	8.85	0.00	784078.375	3119927.609	1072.676	13.6816	0.877	3	0.885	7.83	0	BC-2
0	0	-3	3.237	0+050.00	0.13	0.00	784078.245	3119927.642	1072.678	14.055	0.887	3	0.898	0.12	0	
0	0	-3	3.332	0+053.02	3.02	0.00	784075.379	3119928.594	1072.726	22.7148	1.108	3	1.2	3.62	0	rEW=1.2
0	0	-3	3.382	0+054.60	1.58	0.00	784073.95	3119929.26	1072.752	27.2326	1.224	3	1.2	1.90	0	IP-2/X=784073.688,Y=3119928.750,R=20
0	0	-3	3.431	0+056.18	1.58	0.00	784072.578	3119930.036	1072.777	31.7494	1.339	3	1.2	1.90	0	rEW=1.2
0	0	-3	3.53	0+059.33	3.15	0.00	784070.038	3119931.899	1072.828	40.7843	1.57	3	0.885	2.79	0	EC-2
0	0	-3	3.551	0+060.00	0.67	0.00	784069.531	3119932.336	1072.838	40.7843	1.619	3	0.818	0.55	0	
0	0	-3	3.808	0+068.18	8.18	0.00	784063.34	3119937.677	1072.969	40.7843	2.218	3	0	0.00	0	rEW=0
0	0	-3	3.828	0+068.82	0.64	0.00	784062.853	3119938.098	1072.98	40.7843	2.265	3	0	0.00	0	rEW=0
0	0	-3	3.865	0+070.00	1.18	0.00	784061.959	3119938.868	1072.999	40.7843	2.352	3	0.118	0.14	0	
0	0	-3	4.016	0+074.82	4.82	0.00	784058.31	3119942.017	1073.076	40.7843	2.705	3	0.6	2.89	0	BC-3
0	0	-3	4.092	0+077.23	2.41	0.00	784056.554	3119943.659	1073.114	45.3849	2.881	3	0.841	2.03	0	IEW=0
0	-0.059	-3	4.111	0+077.82	0.59	0.03	784056.143	3119944.084	1073.124	46.5141	2.925	3	0.9	0.53	0	rEW=0.9
0	-0.25	-3	4.17	0+079.73	1.91	0.48	784054.873	3119945.51	1073.155	50.1617	3.064	3	0.9	1.72	0	IP-3/X=784054.562,Y=3119945.250,R=30
0	-0.277	-3	4.179	0+080.00	0.27	0.07	784054.701	3119945.718	1073.159	50.6771	3.084	3	0.9	0.24	0	
0	-0.441	-3	4.23	0+081.64	1.64	0.72	784053.697	3119947.015	1073.185	53.81	3.204	3	0.9	1.48	0	rEW=0.9
0	-0.741	-3	4.325	0+084.64	3.00	2.22	784052.05	3119949.52	1073.233	59.5345	3.424	3	0.6	1.80	0	EC-3
0	-1.277	-3	4.493	0+090.00	5.36	6.84	784049.333	3119954.14	1073.319	59.5345	3.817	3	0.064	0.34	0	
0	-1.341	-3	4.513	0+090.64	0.64	0.86	784049.008	3119954.691	1073.329	59.5345	3.864	3	0	0.00	0	rEW=0
0	-1.359	-3	4.519	0+090.82	0.18	0.24	784048.917	3119954.847	1073.332	59.5345	3.877	3	0	0.00	0	BC-4
0	-1.6	-3	4.594	0+093.23	2.41	3.86	784047.571	3119956.849	1073.371	52.6333	4.053	3	0	0.00	0	IEW=1.6
0	-1.6	-3	4.632	0+094.44	1.21	1.94	784046.811	3119957.785	1073.39	49.1787	4.141	3	0	0.00	0	IP-4/X=784047.062,Y=3119958.000,R=20
0	-1.6	-3	4.67	0+095.64	1.20	1.92	784045.996	3119958.673	1073.41	45.7252	4.23	3	0	0.00	0	IEW=1.6
0	-1.6	-3	4.746	0+098.05	2.41	3.86	784044.215	3119960.291	1073.448	38.8261	4.406	3	0	0.00	0	EC-4
0	-1.6	-3	4.807	0+100.00	1.95	3.12	784042.696	3119961.513	1073.479	38.8261	4.549	3	0	0.00	0	
0	-1.6	-3	4.894	0+102.78	2.78	4.45	784040.531	3119963.256	1073.524	38.8261	4.753	3	0	0.00	0	BC-5
0	-1.6	-3	5	0+106.16	3.38	5.41	784037.736	3119965.14	1073.578	29.1539	5	3	0	0.00	0	IEW=1.6
0	-1.6	-3	5	0+107.85	1.69	2.70	784036.228	3119965.9	1073.609	24.3147	5	3	0	0.00	0	IP-5/X=784036.500,Y=3119966.500,R=20
0	-1.6	-3	5	0+109.53	1.68	2.69	784034.662	3119966.53	1073.645	19.4777	5	3	0	0.00	0	IEW=1.6
0	-1.577	-3	4.966	0+110.00	0.47	0.74	784034.22	3119966.68	1073.655	18.1405	4.966	3	0	0.00	0	
0	-1.434	-3	4.75	0+112.91	2.91	4.17	784031.401	3119967.382	1073.729	9.8135	4.75	3	0	0.00	0	EC-5
0	-1.085	-3	4.226	0+120.00	7.09	7.69	784024.414	3119968.59	1073.966	9.8135	4.226	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.931	-3	3.996	0+123.11	3.11	2.90	784021.35	3119969.121	1074.095	9.8135	3.996	3	0	0.00	0	BC-6
0	-0.8	-3	3.798	0+125.78	2.67	2.14	784018.708	3119969.506	1074.218	6.7582	3.798	3	0	0.00	0	IEW=0.8
0	-0.8	-3	3.6	0+130.00	4.22	3.38	784014.498	3119969.825	1074.419	1.9186	3.6	3	0	0.00	0	
0	-0.8	-3	3.6	0+131.13	1.13	0.90	784013.368	3119969.85	1074.47	0.6234	3.6	3	0	0.00	0	IP-6/X=784013.375,Y=3119970.500,R=50
0	-0.8	-3	3.295	0+134.36	3.23	2.58	784010.139	3119969.781	1074.599	356.9217	3.295	3	0	0.00	0	rEW=0
0	-0.8	-3	2.131	0+136.48	2.12	1.70	784008.022	3119969.622	1074.671	354.4888	2.131	3	0.212	0.45	0	IEW=0.8
0	-0.533	-3	0.67	0+139.15	2.67	1.42	784005.376	3119969.295	1074.747	351.4309	0.67	3	0.479	1.28	0	EC-6
0	-0.448	-3	0.204	0+140.00	0.85	0.38	784004.535	3119969.168	1074.768	351.4309	0.204	3	0.564	0.48	0	
0	-0.212	-3	-1.089	0+142.36	2.36	0.50	784002.202	3119968.816	1074.818	351.4309	-1.089	3	0.8	1.89	0	BC-7
0	0	-3	-2.253	0+144.48	2.12	0.00	784000.088	3119968.612	1074.852	357.5154	-2.253	3	1.012	2.15	0	IEW=0
0	0	-3	-2.536	0+145.00	0.52	0.00	783999.572	3119968.596	1074.858	358.9944	-2.536	3	1.064	0.55	0	existing
0	0	-3	-3.281	0+146.36	1.36	0.00	783998.213	3119968.618	1074.873	2.8889	-3.281	3	1.2	1.63	0	rEW=1.2
0	0	-3	-3.6	0+149.23	2.87	0.00	783995.366	3119968.968	1074.891	11.1133	-3.6	3	1.354	3.89	0	IP-7/X=783995.125,Y=3119967.750,R=20
0	0	-3	-3.6	0+150.00	0.77	0.00	783994.614	3119969.131	1074.893	13.3178	-3.6	3	1.396	1.07	0	
0	0	-3	-2.134	0+156.10	6.10	0.00	783988.979	3119971.415	1074.938	30.8052	-2.134	3	1.724	10.52	0	EC-7
0	0	-3	-1.85	0+156.99	0.89	0.00	783988.214	3119971.87	1074.949	30.8052	-1.85	3	1.772	1.58	0	BC-8
0	0	-3	-1.087	0+159.37	2.38	0.00	783986.288	3119973.273	1074.985	41.3107	-1.087	3	1.9	4.52	0	rEW=1.9
0	0	-3	-0.887	0+160.00	0.63	0.00	783985.828	3119973.698	1074.996	44.0712	-0.887	3	1.9	1.20	0	
0	0	-3	-0.815	0+160.22	0.22	0.00	783985.668	3119973.855	1075	45.0592	-0.815	3	1.9	0.42	0	IEW=0
0	-0.034	-3	-0.706	0+160.57	0.35	0.01	783985.43	3119974.1	1075.006	46.5647	-0.706	3	1.9	0.66	0	IP-8/X=783985.062,Y=3119973.750,R=13
0	-0.153	-3	-0.325	0+161.76	1.19	0.18	783984.652	3119975.001	1075.03	51.8131	-0.325	3	1.9	2.26	0	rEW=1.9
0	-0.392	-3	0.438	0+164.14	2.38	0.93	783983.358	3119976.998	1075.084	62.3159	0.438	3	1.662	3.96	0	EC-8
0	-0.978	-3	2.313	0+170.00	5.86	5.73	783980.635	3119982.187	1075.254	62.3159	2.313	3	1.076	6.31	0	
0	-1.267	-3	3.237	0+172.89	2.89	3.66	783979.293	3119984.746	1075.352	62.3159	3.237	3	0.787	2.27	0	BC-9
0	-1.9	-3	5.263	0+179.22	6.33	12.03	783975.269	3119989.581	1075.568	38.1259	5.263	3	0.153	0.97	0	IEW=1.9
0	-1.9	-3	5.512	0+180.00	0.78	1.48	783974.645	3119990.045	1075.594	35.1554	5.512	3	0.076	0.06	0	
0	-1.9	-3	5.754	0+180.76	0.76	1.44	783974.016	3119990.464	1075.62	32.2682	5.754	3	0	0.00	0	rEW=0
0	-1.9	-3	6.8	0+189.60	8.84	16.80	783965.617	3119992.776	1075.921	358.5063	6.8	3	0	0.00	0	IP-9/X=783965.125,Y=3120011.750,R=15
0	-1.9	-3	6.8	0+190.00	0.40	0.76	783965.213	3119992.76	1075.935	356.9619	6.8	3	0	0.00	0	
0	-1.9	-3	5.113	0+199.97	9.97	18.94	783956.146	3119989.083	1076.224	318.8924	5.113	3	0	0.00	0	IEW=1.9
0	-1.897	-3	5.101	0+200.00	0.03	0.06	783956.12	3119989.061	1076.225	318.7623	5.101	3	0	0.00	0	
0	-1.267	-3	2.888	0+206.30	6.30	7.98	783952.381	3119984.051	1076.343	294.7069	2.888	3	0	0.00	0	EC-9
0	-0.897	-3	1.589	0+210.00	3.70	3.32	783950.834	3119980.69	1076.389	294.7069	1.589	3	0	0.00	0	
0	-0.397	-3	-0.168	0+215.00	5.00	1.99	783948.744	3119976.147	1076.423	294.7069	-0.168	3	0	0.00	0	existing
0	0	-3	-1.561	0+218.97	3.97	0.00	783947.086	3119972.544	1076.428	294.7069	-1.561	3	0	0.00	0	IEW=0
0	0	-3	-1.924	0+220.00	1.03	0.00	783946.655	3119971.605	1076.426	294.7069	-1.924	3	0	0.00	0	
0	0	-3	-1.93	0+220.02	0.02	0.00	783946.648	3119971.59	1076.426	294.7069	-1.93	3	0	0.00	0	rEW=0
0	0	-3	-3.803	0+225.35	5.33	0.00	783944.418	3119966.745	1076.385	294.7069	-3.803	3	0.533	2.84	0	BC-10
0	0	-3	-4.74	0+228.02	2.67	0.00	783943.231	3119964.354	1076.341	298.1021	-4.74	3	0.8	2.14	0	rEW=0.8
0	0	-3	-5.437	0+230.00	1.98	0.00	783942.258	3119962.626	1076.308	300.6273	-5.437	3	0.8	1.58	0	
0	0	-3	-5.9	0+234.31	4.31	0.00	783939.892	3119959.032	1076.237	306.108	-5.9	3	0.8	3.45	0	IP-10/X=783940.625,Y=3119958.500,R=45
0	0	-3	-4.618	0+240.00	5.69	0.00	783936.254	3119954.655	1076.144	313.3594	-4.618	3	0.8	4.55	0	
0	0	-3	-4.337	0+240.59	0.59	0.00	783935.843	3119954.226	1076.134	314.1159	-4.337	3	0.8	0.47	0	rEW=0.8
0	0	-3	-3.074	0+243.26	2.67	0.00	783933.935	3119952.371	1076.09	317.5041	-3.074	3	0.533	1.42	0	EC-10

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-0.549	0+248.59	5.33	0.00	783930.003	3119948.768	1076.003	317.5041	-0.549	3	0	0.00	0	rEW=0
0	0	-3	0.117	0+250.00	1.41	0.00	783928.966	3119947.818	1075.979	317.5041	0.117	3	0	0.00	0	
0	0	-3	1.214	0+252.32	2.32	0.00	783927.258	3119946.253	1075.944	317.5041	1.214	3	0	0.00	0	IEW=0
0	-0.533	-3	3.739	0+257.65	5.33	2.84	783923.325	3119942.65	1075.939	317.5041	3.739	3	0	0.00	0	BC-11
0	-0.768	-3	4.852	0+260.00	2.35	1.80	783921.634	3119941.025	1075.972	314.8104	4.852	3	0	0.00	0	existing
0	-0.8	-3	5.002	0+260.32	0.32	0.26	783921.412	3119940.8	1075.978	314.4482	5.002	3	0	0.00	0	IEW=0.8
0	-0.8	-3	5.9	0+264.50	4.18	3.34	783918.614	3119937.699	1076.094	309.6606	5.9	3	0	0.00	0	IP-11/X=783918.250,Y=3119938.000,R=50
0	-0.8	-3	5.377	0+268.67	4.17	3.34	783916.084	3119934.374	1076.278	304.8715	5.377	3	0	0.00	0	IEW=0.8
0	-0.667	-3	5.011	0+270.00	1.33	0.89	783915.34	3119933.276	1076.351	303.3516	5.011	3	0	0.00	0	
0	-0.533	-3	4.641	0+271.34	1.34	0.71	783914.619	3119932.147	1076.431	301.8162	4.641	3	0	0.00	0	EC-11
0	0	-3	3.17	0+276.67	5.33	0.00	783911.807	3119927.615	1076.82	301.8162	3.17	3	0	0.00	0	IEW=0
0	0	-3	2.252	0+280.00	3.33	0.00	783910.053	3119924.788	1077.118	301.8162	2.252	3	0	0.00	0	
0	0	-3	-0.506	0+290.00	10.00	0.00	783904.781	3119916.291	1078.118	301.8162	-0.506	3	0	0.00	0	
0	0	-3	-1.37	0+293.13	3.13	0.00	783903.129	3119913.628	1078.431	301.8162	-1.37	3	0	0.00	0	rEW=0
0	0	-3	-3.264	0+300.00	6.87	0.00	783899.509	3119907.793	1079.12	301.8162	-3.264	3	0.687	4.72	0	
0	0	-3	-4.864	0+305.80	5.80	0.00	783896.451	3119902.865	1079.701	301.8162	-4.864	3	1.267	7.35	0	BC-12
0	0	-3	-6.023	0+310.00	4.20	0.00	783893.704	3119899.713	1080.121	320.3276	-6.023	3	1.687	7.09	0	
0	0	-3	-6.611	0+312.13	2.13	0.00	783891.958	3119898.491	1080.335	329.7309	-6.611	3	1.9	4.05	0	rEW=1.9
0	0	-3	-6.9	0+316.87	4.74	0.00	783887.527	3119896.893	1080.809	350.6058	-6.9	3	1.9	9.01	0	IP-12/X=783888.625,Y=3119890.250,R=13
0	0	-3	-6.9	0+320.00	3.13	0.00	783884.407	3119896.757	1081.123	4.4028	-6.9	3	1.9	5.95	0	
0	0	-3	-6.574	0+321.61	1.61	0.00	783882.817	3119896.979	1081.284	11.4828	-6.574	3	1.9	3.06	0	rEW=1.9
0	0	-3	-4.604	0+327.94	6.33	0.00	783877.153	3119899.673	1081.918	39.4007	-4.604	3	1.267	8.02	0	EC-12
0	0	-3	-3.963	0+330.00	2.06	0.00	783875.561	3119900.981	1082.122	39.4007	-3.963	3	1.061	2.19	0	
0	0	-3	-0.852	0+340.00	10.00	0.00	783867.834	3119907.328	1082.959	39.4007	-0.852	3	0.061	0.61	0	
0	0	-3	-0.663	0+340.61	0.61	0.00	783867.365	3119907.713	1083.002	39.4007	-0.663	3	0	0.00	0	rEW=0
0	0	-3	0.889	0+345.59	4.98	0.00	783863.512	3119910.879	1083.318	39.4007	0.889	3	0	0.00	0	IEW=0
0	-0.441	-3	2.26	0+350.00	4.41	1.94	783860.107	3119913.676	1083.549	39.4007	2.26	3	0	0.00	0	
0	-1.441	-3	5.371	0+360.00	10.00	14.41	783852.379	3119920.023	1084.05	39.4007	5.371	3	0	0.00	0	
0	-1.458	-3	5.424	0+360.17	0.17	0.25	783852.248	3119920.131	1084.058	39.4007	5.424	3	0	0.00	0	BC-13
0	-1.9	-3	6.8	0+364.59	4.42	8.40	783848.423	3119922.308	1084.279	19.9055	6.8	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.8	0+366.81	2.22	4.22	783846.29	3119922.881	1084.39	10.1594	6.8	3	0	0.00	0	IP-13/X=783846.625,Y=3119924.750,R=13
0	-1.9	-3	6.8	0+369.02	2.21	4.20	783844.091	3119923.085	1084.501	0.4143	6.8	3	0	0.00	0	IEW=1.9
0	-1.802	-3	6.52	0+370.00	0.98	1.77	783843.108	3119923.055	1084.55	356.0789	6.52	3	0	0.00	0	
0	-1.458	-3	5.542	0+373.44	3.44	5.02	783839.747	3119922.37	1084.722	340.9115	5.542	3	0	0.00	0	EC-13
0	-0.802	-3	3.677	0+380.00	6.56	5.26	783833.547	3119920.224	1085.057	340.9115	3.677	3	0	0.00	0	
0	0	-3	1.398	0+388.02	8.02	0.00	783825.972	3119917.603	1085.615	340.9115	1.398	3	0	0.00	0	IEW=0
0	0	-3	0.835	0+390.00	1.98	0.00	783824.097	3119916.954	1085.785	340.9115	0.835	3	0	0.00	0	
0	0	-3	-0.546	0+394.86	4.86	0.00	783819.508	3119915.366	1086.258	340.9115	-0.546	3	0	0.00	0	rEW=0
0	0	-3	-2.008	0+400.00	5.14	0.00	783814.647	3119913.684	1086.835	340.9115	-2.008	3	0.514	2.64	0	
0	0	-3	-2.062	0+400.19	0.19	0.00	783814.468	3119913.622	1086.857	340.9115	-2.062	3	0.533	0.10	0	BC-14
0	0	-3	-2.821	0+402.86	2.67	0.00	783811.922	3119912.824	1087.166	344.3068	-2.821	3	0.8	2.14	0	rEW=0.8
0	0	-3	-4.851	0+410.00	7.14	0.00	783804.92	3119911.445	1087.991	353.4028	-4.851	3	0.8	5.71	0	
0	0	-3	-5.3	0+417.27	7.27	0.00	783797.662	3119911.195	1088.831	2.6595	-5.3	3	0.8	5.82	0	IP-14/X=783797.500,Y=3119907.750,R=45
0	0	-3	-5.3	0+420.00	2.73	0.00	783794.941	3119911.405	1089.147	6.1348	-5.3	3	0.8	2.18	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-3.602	0+426.04	6.04	0.00	783788.994	3119912.451	1089.845	13.8287	-3.602	3	0.8	4.83	0	IEW=0
0	-0.396	-3	-1.42	0+430.00	3.96	1.57	783785.198	3119913.565	1090.303	18.8674	-1.42	3	0.8	3.17	0	
0	-0.564	-3	-0.493	0+431.68	1.68	0.95	783783.616	3119914.139	1090.497	21.0103	-0.493	3	0.8	1.34	0	rEW=0.8
0	-0.831	-3	0.977	0+434.35	2.67	2.22	783781.152	3119915.17	1090.805	24.4129	0.977	3	0.533	1.42	0	EC-14
0	-1.067	-3	2.278	0+436.71	2.36	2.52	783779.003	3119916.145	1091.078	24.4129	2.278	3	0.297	0.70	0	BC-15
0	-1.364	-3	3.917	0+439.68	2.97	4.05	783776.213	3119917.169	1091.421	15.8938	3.917	3	0	0.00	0	rEW=0
0	-1.396	-3	4.092	0+440.00	0.32	0.45	783775.908	3119917.254	1091.458	14.9868	4.092	3	0	0.00	0	
0	-1.6	-3	5.218	0+442.04	2.04	3.26	783773.911	3119917.68	1091.694	9.1345	5.218	3	0	0.00	0	IEW=1.6
0	-1.6	-3	5.3	0+444.94	2.90	4.64	783771.032	3119917.932	1092.029	0.848	5.3	3	0	0.00	0	IP-15/X=783771.062,Y=3119919.750,R=20
0	-1.6	-3	5.218	0+447.83	2.89	4.62	783768.148	3119917.766	1092.341	352.5651	5.218	3	0	0.00	0	IEW=1.6
0	-1.383	-3	4.017	0+450.00	2.17	3.00	783766.013	3119917.368	1092.553	346.3404	4.017	3	0	0.00	0	
0	-1.067	-3	2.271	0+453.16	3.16	3.37	783763.018	3119916.385	1092.825	337.2972	2.271	3	0	0.00	0	EC-15
0	-1.025	-3	2.039	0+453.58	0.42	0.43	783762.63	3119916.222	1092.858	337.2972	2.039	3	0	0.00	0	rEW=0
0	-0.383	-3	-1.509	0+460.00	6.42	2.46	783756.708	3119913.745	1093.269	337.2972	-1.509	3	0.642	4.12	0	
0	-0.225	-3	-2.382	0+461.58	1.58	0.36	783755.25	3119913.135	1093.344	337.2972	-2.382	3	0.8	1.26	0	BC-16
0	0	-3	-3.624	0+463.83	2.25	0.00	783753.141	3119912.362	1093.432	342.4464	-3.624	3	1.025	2.31	0	IEW=0
0	0	-3	-4.593	0+465.58	1.75	0.00	783751.452	3119911.892	1093.487	346.4651	-4.593	3	1.2	2.10	0	rEW=1.2
0	0	-3	-5.7	0+470.00	4.42	0.00	783747.086	3119911.242	1093.624	356.5946	-5.7	3	1.2	5.30	0	
0	0	-3	-5.7	0+470.59	0.59	0.00	783746.502	3119911.214	1093.642	357.9346	-5.7	3	1.2	0.71	0	IP-16/X=783746.562,Y=3119909.500,R=25
0	0	-3	-5.708	0+475.59	5.00	0.00	783741.516	3119911.534	1093.797	9.4043	-5.708	3	1.2	6.00	0	rEW=1.2
0	0	-3	-5.723	0+479.59	4.00	0.00	783737.636	3119912.5	1093.921	18.5781	-5.723	3	0.8	3.20	0	EC-16
0	0	-3	-5.725	0+480.00	0.41	0.00	783737.247	3119912.631	1093.934	18.5781	-5.725	3	0.759	0.31	0	
0	0	-3	-5.755	0+487.59	7.59	0.00	783730.052	3119915.049	1094.169	18.5781	-5.755	3	0	0.00	0	rEW=0
0	0	-3	-5.764	0+490.00	2.41	0.00	783727.768	3119915.817	1094.243	18.5781	-5.764	3	0	0.00	0	
0	0	-3	-5.803	0+500.00	10.00	0.00	783718.289	3119919.003	1094.553	18.5781	-5.803	3	0	0.00	0	
0	0	-3	-5.842	0+510.00	10.00	0.00	783708.81	3119922.189	1094.862	18.5781	-5.842	3	0	0.00	0	
0	0	-3	-5.882	0+520.00	10.00	0.00	783699.331	3119925.375	1095.172	18.5781	-5.882	3	0	0.00	0	
0	0	-3	-5.921	0+530.00	10.00	0.00	783689.852	3119928.561	1095.482	18.5781	-5.921	3	0	0.00	0	
0	0	-3	-5.933	0+533.16	3.16	0.00	783686.857	3119929.568	1095.579	18.5781	-5.933	3	0	0.00	0	rEW=0
0	0	-3	-5.956	0+539.16	6.00	0.00	783681.17	3119931.479	1095.765	18.5781	-5.956	3	0.6	3.60	0	BC-17
0	0	-3	-5.96	0+540.00	0.84	0.00	783680.376	3119931.756	1095.791	19.9535	-5.96	3	0.684	0.57	0	
0	0	-3	-5.968	0+542.16	2.16	0.00	783678.37	3119932.555	1095.86	23.4888	-5.968	3	0.9	1.94	0	rEW=0.9
0	0	-3	-5.999	0+550.00	7.84	0.00	783671.588	3119936.456	1096.145	36.3235	-5.999	3	0.9	7.06	0	
0	0	-3	-6	0+555.88	5.88	0.00	783667.168	3119940.316	1096.392	45.9411	-6	3	0.9	5.29	0	IP-17/X=783664.000,Y=3119937.250,R=35
0	0	-3	-6	0+560.00	4.12	0.00	783664.481	3119943.442	1096.582	52.693	-6	3	0.9	3.71	0	
0	0	-3	-3.793	0+569.59	9.59	0.00	783659.779	3119951.767	1097.038	68.3937	-3.793	3	0.9	8.63	0	rEW=0.9
0	0	-3	-3.682	0+570.00	0.41	0.00	783659.631	3119952.149	1097.058	69.0644	-3.682	3	0.859	0.35	0	
0	0	-3	-2.98	0+572.59	2.59	0.00	783658.795	3119954.599	1097.181	73.3008	-2.98	3	0.6	1.55	0	EC-17
0	0	-3	-1.353	0+578.59	6.00	0.00	783657.071	3119960.346	1097.467	73.3008	-1.353	3	0	0.00	0	rEW=0
0	0	-3	-0.971	0+580.00	1.41	0.00	783656.666	3119961.696	1097.534	73.3008	-0.971	3	0	0.00	0	
0	0	-3	1.179	0+587.93	7.93	0.00	783654.387	3119969.295	1097.912	73.3008	1.179	3	0	0.00	0	IEW=0
0	-0.207	-3	1.739	0+590.00	2.07	0.43	783653.793	3119971.274	1098.013	73.3008	1.739	3	0	0.00	0	
0	-1.207	-3	4.45	0+600.00	10.00	12.07	783650.919	3119980.853	1098.573	73.3008	4.45	3	0	0.00	0	
0	-1.267	-3	4.612	0+600.60	0.60	0.76	783650.747	3119981.427	1098.611	73.3008	4.612	3	0	0.00	0	BC-18

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.9	-3	6.329	0+606.93	6.33	12.03	783647.548	3119986.824	1099.031	45.3865	6.329	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.9	0+610.00	3.07	5.83	783645.158	3119988.734	1099.252	31.8708	6.9	3	0	0.00	0	
0	-1.9	-3	6.9	0+613.26	3.26	6.19	783642.204	3119990.092	1099.499	17.5039	6.9	3	0	0.00	0	IP-18/X=783645.250,Y=3119999.750,R=13
0	-1.9	-3	6.9	0+619.59	6.33	12.03	783635.951	3119990.481	1100.015	349.6167	6.9	3	0	0.00	0	IEW=1.9
0	-1.887	-3	6.9	0+620.00	0.41	0.77	783635.546	3119990.4	1100.05	347.7963	6.9	3	0	0.00	0	Required
0	-1.705	-3	6.9	0+625.92	5.92	10.09	783630.239	3119987.897	1100.578	321.7044	6.9	3	0	0.00	0	EC-18
0	-1.652	-3	6.9	0+627.64	1.72	2.84	783628.889	3119986.831	1100.74	321.7044	6.9	3	0	0.00	0	BC-19
0	-1.58	-3	6.9	0+630.00	2.36	3.73	783627.106	3119985.281	1100.967	316.2966	6.9	3	0	0.00	0	
0	-1.365	-3	6.9	0+636.99	6.99	9.54	783622.789	3119979.812	1101.678	300.2759	6.9	3	0	0.00	0	IP-19/X=783621.188,Y=3119980.750,R=25
0	-1.272	-3	6.9	0+640.00	3.01	3.83	783621.431	3119977.128	1102.002	293.3779	6.9	3	0	0.00	0	
0	-1.2	-3	6.388	0+642.34	2.34	2.81	783620.605	3119974.94	1102.261	288.016	6.388	3	0	0.00	0	IEW=1.2
0	-1.493	-3	5.471	0+646.34	4.00	5.97	783619.678	3119971.058	1102.72	278.8569	5.471	3	0	0.00	0	EC-19
0	-1.629	-3	5.046	0+648.19	1.85	3.01	783619.393	3119969.23	1102.938	278.8569	5.046	3	0	0.00	0	BC-20
0	-1.762	-3	4.631	0+650.00	1.81	3.19	783619.223	3119967.431	1103.153	271.9447	4.631	3	0	0.00	0	
0	-1.9	-3	4.2	0+651.88	1.88	3.57	783619.277	3119965.553	1103.377	264.7634	4.2	3	0	0.00	0	IEW=1.9
0	-1.9	-3	4.2	0+653.73	1.85	3.52	783619.557	3119963.731	1103.596	257.7177	4.2	3	0	0.00	0	IP-20/X=783618.500,Y=3119963.500,R=15
0	-1.9	-3	4.2	0+655.57	1.84	3.50	783620.06	3119961.957	1103.816	250.6699	4.2	3	0	0.00	0	IEW=1.9
0	-1.531	-3	2.168	0+659.26	3.69	5.65	783621.696	3119958.659	1104.254	236.5702	2.168	3	0	0.00	0	EC-20
0	-1.457	-3	1.761	0+660.00	0.74	1.08	783622.103	3119958.041	1104.342	236.5702	1.761	3	0	0.00	0	
0	-1.324	-3	1.029	0+661.33	1.33	1.76	783622.836	3119956.931	1104.5	236.5702	1.029	3	0	0.00	0	rEW=0
0	-0.724	-3	-2.275	0+667.33	6.00	4.34	783626.142	3119951.924	1105.214	236.5702	-2.275	3	0.6	3.60	0	BC-21
0	-0.457	-3	-3.745	0+670.00	2.67	1.22	783627.512	3119949.632	1105.531	241.6709	-3.745	3	0.867	2.31	0	
0	-0.424	-3	-3.926	0+670.33	0.33	0.14	783627.667	3119949.341	1105.57	242.3006	-3.926	3	0.9	0.30	0	rEW=0.9
0	-0.2	-3	-4.2	0+672.58	2.25	0.45	783628.635	3119947.316	1105.838	246.5882	-4.2	3	0.9	2.03	0	IP-21/X=783629.062,Y=3119947.500,R=30
0	0	-3	-4.224	0+674.57	1.99	0.00	783629.366	3119945.46	1106.074	250.3987	-4.224	3	0.9	1.79	0	IEW=0
0	0	-3	-4.248	0+674.82	0.25	0.00	783629.449	3119945.224	1106.104	250.8765	-4.248	3	0.9	0.23	0	rEW=0.9
0	0	-3	-4.535	0+677.82	3.00	0.00	783630.29	3119942.344	1106.461	256.6075	-4.535	3	0.6	1.80	0	EC-21
0	0	-3	-4.743	0+680.00	2.18	0.00	783630.794	3119940.224	1106.72	256.6075	-4.743	3	0.382	0.83	0	
0	0	-3	-5.109	0+683.82	3.82	0.00	783631.679	3119936.508	1107.174	256.6075	-5.109	3	0	0.00	0	rEW=0
0	0	-3	-5.136	0+684.10	0.28	0.00	783631.744	3119936.235	1107.207	256.6075	-5.136	3	0	0.00	0	rEW=0
0	0	-3	-5.519	0+688.10	4.00	0.00	783632.671	3119932.344	1107.683	256.6075	-5.519	3	0.4	1.60	0	BC-22
0	0	-3	-5.701	0+690.00	1.90	0.00	783633.076	3119930.484	1107.909	258.7845	-5.701	3	0.59	1.12	0	
0	0	-3	-5.71	0+690.10	0.10	0.00	783633.096	3119930.386	1107.92	258.8991	-5.71	3	0.6	0.06	0	rEW=0.6
0	0	-3	-5.9	0+694.08	3.98	0.00	783633.705	3119926.459	1108.394	263.454	-5.9	3	0.6	2.39	0	IP-22/X=783634.062,Y=3119926.500,R=50
0	0	-3	-5.607	0+698.05	3.97	0.00	783634.001	3119922.496	1108.865	268.0092	-5.607	3	0.6	2.38	0	rEW=0.6
0	0	-3	-5.319	0+700.00	1.95	0.00	783634.031	3119920.546	1109.097	270.2441	-5.319	3	0.405	0.79	0	
0	0	-3	-5.312	0+700.05	0.05	0.00	783634.03	3119920.496	1109.103	270.3029	-5.312	3	0.4	0.02	0	EC-22
0	0	-3	-4.721	0+704.05	4.00	0.00	783634.009	3119916.497	1109.575	270.3029	-4.721	3	0	0.00	0	rEW=0
0	0	-3	-3.843	0+710.00	5.95	0.00	783633.978	3119910.547	1110.2	270.3029	-3.843	3	0	0.00	0	
0	0	-3	-2.366	0+720.00	10.00	0.00	783633.925	3119900.547	1111.004	270.3029	-2.366	3	0	0.00	0	
0	0	-3	-0.89	0+730.00	10.00	0.00	783633.872	3119890.547	1111.586	270.3029	-0.89	3	0	0.00	0	
0	0	-3	0.57	0+739.89	9.89	0.00	783633.82	3119880.657	1112.151	270.3029	0.57	3	0	0.00	0	BC-23
0	0	-3	0.587	0+740.00	0.11	0.00	783633.82	3119880.547	1112.157	270.2609	0.587	3	0	0.00	0	
0	0	-3	2.063	0+750.00	10.00	0.00	783634.107	3119870.553	1112.729	266.4412	2.063	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	3	0+760.00	10.00	0.00	783635.06	3119860.6	1113.3	262.6213	3	3	0	0.00	0	
0	0	-3	3	0+764.58	4.58	0.00	783635.717	3119856.073	1113.562	260.874	3	3	0	0.00	0	IP-23/X=783633.688,Y=3119855.750,R=150
0	0	-3	3	0+770.00	5.42	0.00	783636.674	3119850.733	1113.871	258.8016	3	3	0	0.00	0	
0	0	-3	1.086	0+780.00	10.00	0.00	783638.941	3119840.996	1114.443	254.9822	1.086	3	0	0.00	0	
0	0	-3	-1.377	0+789.26	9.26	0.00	783641.613	3119832.137	1114.972	251.4474	-1.377	3	0	0.00	0	EC-23
0	0	-3	-1.434	0+789.47	0.21	0.00	783641.681	3119831.934	1114.984	251.4474	-1.434	3	0	0.00	0	rEW=0
0	-0.053	-3	-1.574	0+790.00	0.53	0.03	783641.848	3119831.435	1115.014	251.4474	-1.574	3	0.053	0.03	0	
0	-0.117	-3	-1.744	0+790.64	0.64	0.07	783642.052	3119830.828	1115.051	251.4474	-1.744	3	0.117	0.07	0	BC-24
0	-0.175	-3	-1.9	0+791.22	0.58	0.10	783642.235	3119830.276	1115.084	251.7816	-1.9	3	0.175	0.10	0	rEW=0.17
0	-0.175	-3	-3.9	0+800.00	8.78	1.54	783644.61	3119821.83	1115.623	256.8101	-3.9	3	0.175	1.54	0	
0	-0.175	-3	-3.9	0+802.80	2.80	0.49	783645.21	3119819.1	1115.828	258.4116	-3.9	3	0.175	0.49	0	IP-24/X=783645.938,Y=3119819.250,R=100
0	-0.175	-3	-3.029	0+810.00	7.20	1.26	783646.401	3119811.996	1116.442	262.5396	-3.029	3	0.175	1.26	0	
0	-0.175	-3	-1.823	0+814.37	4.37	0.76	783646.874	3119807.655	1116.873	265.0417	-1.823	3	0.175	0.76	0	IEW=0.17
0	-0.117	-3	-1.662	0+814.95	0.58	0.07	783646.923	3119807.075	1116.933	265.3765	-1.662	3	0.117	0.07	0	EC-24
0	0	-3	-1.339	0+816.12	1.17	0.00	783647.017	3119805.912	1117.054	265.3765	-1.339	3	0	0.00	0	IEW=0
0	0	-3	-0.267	0+820.00	3.88	0.00	783647.33	3119802.041	1117.457	265.3765	-0.267	3	0	0.00	0	
0	0	-3	2.399	0+829.65	9.65	0.00	783648.108	3119792.422	1118.458	265.3765	2.399	3	0	0.00	0	IEW=0
0	-0.035	-3	2.495	0+830.00	0.35	0.01	783648.136	3119792.074	1118.495	265.3765	2.495	3	0	0.00	0	
0	-0.8	-3	4.608	0+837.65	7.65	6.12	783648.752	3119784.448	1119.288	265.3765	4.608	3	0	0.00	0	BC-25
0	-1.035	-3	5.258	0+840.00	2.35	2.43	783649.034	3119782.113	1119.532	260.8878	5.258	3	0	0.00	0	
0	-1.2	-3	5.713	0+841.65	1.65	1.98	783649.339	3119780.492	1119.703	257.7372	5.713	3	0	0.00	0	IEW=1.2
0	-1.2	-3	6	0+845.21	3.56	4.27	783650.298	3119777.071	1120.072	250.9478	6	3	0	0.00	0	IP-25/X=783649.375,Y=3119776.750,R=30
0	-1.2	-3	5.742	0+848.76	3.55	4.26	783651.655	3119773.787	1120.441	244.1575	5.742	3	0	0.00	0	IEW=1.2
0	-1.076	-3	5.434	0+850.00	1.24	1.33	783652.218	3119772.683	1120.57	241.7906	5.434	3	0	0.00	0	
0	-0.8	-3	4.748	0+852.76	2.76	2.21	783653.635	3119770.311	1120.856	236.5099	4.748	3	0	0.00	0	EC-25
0	-0.076	-3	2.95	0+860.00	7.24	0.55	783657.63	3119764.273	1121.608	236.5099	2.95	3	0	0.00	0	
0	0	-3	2.761	0+860.76	0.76	0.00	783658.05	3119763.639	1121.686	236.5099	2.761	3	0	0.00	0	IEW=0
0	0	-3	0.465	0+870.00	9.24	0.00	783663.148	3119755.933	1122.645	236.5099	0.465	3	0	0.00	0	
0	0	-3	-1.945	0+879.70	9.70	0.00	783668.501	3119747.843	1123.652	236.5099	-1.945	3	0	0.00	0	rEW=0
0	0	-3	-2.019	0+880.00	0.30	0.00	783668.666	3119747.593	1123.683	236.5099	-2.019	3	0.03	0.01	0	
0	0	-3	-3.932	0+887.70	7.70	0.00	783672.915	3119741.172	1124.482	236.5099	-3.932	3	0.8	6.16	0	BC-26
0	0	-3	-4.503	0+890.00	2.30	0.00	783674.096	3119739.195	1124.721	241.7815	-4.503	3	1.03	2.37	0	
0	0	-3	-4.926	0+891.70	1.70	0.00	783674.848	3119737.671	1124.897	245.6771	-4.926	3	1.2	2.04	0	rEW=1.2
0	0	-3	-6.9	0+900.00	8.30	0.00	783676.96	3119729.683	1125.758	264.7006	-6.9	3	1.2	9.96	0	
0	0	-3	-6.9	0+905.62	5.62	0.00	783676.849	3119724.076	1126.342	277.5804	-6.9	3	1.2	6.74	0	IP-26/X=783684.938,Y=3119723.000,R=25
0	0	-3	-6.9	0+910.00	4.38	0.00	783675.894	3119719.807	1126.796	287.6189	-6.9	3	1.2	5.26	0	
0	0	-3	-6.761	0+919.54	9.54	0.00	783671.363	3119711.478	1127.786	309.4816	-6.761	3	1.2	11.45	0	rEW=1.2
0	0	-3	-6.753	0+920.00	0.46	0.00	783671.067	3119711.126	1127.834	310.5357	-6.753	3	1.154	0.53	0	
0	0	-3	-6.691	0+923.54	3.54	0.00	783668.585	3119708.606	1128.201	318.6468	-6.691	3	0.8	2.83	0	EC-26
0	0	-3	-6.578	0+930.00	6.46	0.00	783663.735	3119704.338	1128.871	318.6468	-6.578	3	0.154	0.99	0	
0	0	-3	-6.551	0+931.54	1.54	0.00	783662.579	3119703.321	1129.031	318.6468	-6.551	3	0	0.00	0	rEW=0
0	0	-3	-6.433	0+938.29	6.75	0.00	783657.515	3119698.863	1129.688	318.6468	-6.433	3	0	0.00	0	rEW=0
0	0	-3	-6.403	0+940.00	1.71	0.00	783656.229	3119697.731	1129.854	318.6468	-6.403	3	0.171	0.29	0	
0	0	-3	-6.228	0+950.00	10.00	0.00	783648.722	3119691.124	1130.824	318.6468	-6.228	3	1.171	11.71	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-6.165	0+953.62	3.62	0.00	783646.005	3119688.732	1131.176	318.6468	-6.165	3	1.533	5.55	0	BC-27
0	0	-3	-6.053	0+960.00	6.38	0.00	783640.234	3119686.274	1131.795	355.2045	-6.053	3	2.171	13.85	0	
0	0	-3	-6.031	0+961.29	1.29	0.00	783638.949	3119686.249	1131.92	2.5734	-6.031	3	2.3	2.97	0	rEW=2.3
0	0	-3	-6	0+967.75	6.46	0.00	783633.023	3119688.535	1132.547	39.6075	-6	3	2.3	14.86	0	IP-27/X=783598.875,Y=3119647.250,R=10
0	0	-3	-6	0+970.00	2.25	0.00	783631.465	3119690.151	1132.765	52.4964	-6	3	2.3	5.18	0	Required
0	0	-3	-5.048	0+974.21	4.21	0.00	783629.669	3119693.928	1133.174	76.6378	-5.048	3	2.3	9.68	0	rEW=2.3
0	0	-3	-3.769	0+976.57	2.36	0.00	783629.398	3119696.264	1133.403	90.1432	-3.769	3	2.064	4.87	0	IEW=0
0	-0.343	-3	-1.906	0+980.00	3.43	1.18	783629.989	3119699.626	1133.736	109.7976	-1.906	3	1.721	5.90	0	
0	-0.531	-3	-0.885	0+981.88	1.88	1.00	783630.784	3119701.323	1133.918	120.5451	-0.885	3	1.533	2.88	0	EC-27
0	-0.8	-3	0.576	0+984.57	2.69	2.15	783632.151	3119703.639	1134.179	120.5451	0.576	3	1.264	3.40	0	BC-28
0	-1.2	-3	2.748	0+988.57	4.00	4.80	783633.898	3119707.23	1134.568	111.3758	2.748	3	0.864	3.46	0	IEW=1.2
0	-1.2	-3	3.524	0+990.00	1.43	1.72	783634.381	3119708.575	1134.706	108.1001	3.524	3	0.721	1.03	0	
0	-1.2	-3	5.9	0+997.21	7.21	8.65	783635.609	3119715.658	1135.406	91.5678	5.9	3	0	0.00	0	rEW=0
0	-1.2	-3	5.9	0+999.28	2.07	2.48	783635.58	3119717.719	1135.607	86.8425	5.9	3	0	0.00	0	IP-28/X=783640.625,Y=3119718.000,R=25
0	-1.2	-3	5.9	1+000.00	0.72	0.86	783635.53	3119718.442	1135.677	85.1815	5.9	3	0	0.00	0	
0	-1.2	-3	5.332	1+009.98	9.98	11.98	783632.755	3119727.96	1136.646	62.3085	5.332	3	0	0.00	0	IEW=1.2
0	-1.199	-3	5.33	1+010.00	0.02	0.02	783632.745	3119727.977	1136.648	62.2633	5.33	3	0	0.00	0	
0	-1.045	-3	4.94	1+013.98	3.98	4.16	783630.618	3119731.342	1137.034	53.1293	4.94	3	0	0.00	0	EC-28
0	-0.979	-3	4.774	1+015.68	1.70	1.66	783629.596	3119732.704	1137.199	53.1293	4.774	3	0	0.00	0	rEW=0
0	-0.934	-3	4.659	1+016.85	1.17	1.09	783628.896	3119733.638	1137.312	53.1293	4.659	3	0.117	0.14	0	BC-29
0	-0.912	-3	4.602	1+017.43	0.58	0.53	783628.545	3119734.104	1137.369	52.795	4.602	3	0.175	0.10	0	rEW=0.17
0	-0.812	-3	4.351	1+020.00	2.57	2.09	783626.967	3119736.128	1137.618	51.3245	4.351	3	0.175	0.45	0	
0	-0.543	-3	4	1+026.96	6.96	3.78	783622.435	3119741.402	1138.294	47.3395	4	3	0.175	1.22	0	IP-29/X=783622.812,Y=3119741.750,R=100
0	-0.426	-3	4	1+030.00	3.04	1.30	783620.338	3119743.61	1138.589	45.5948	4	3	0.175	0.53	0	
0	-0.175	-3	3.818	1+036.48	6.48	1.13	783615.66	3119748.087	1139.218	41.8842	3.818	3	0.175	1.13	0	IEW=0.17
0	-0.117	-3	3.8	1+037.06	0.58	0.07	783615.224	3119748.475	1139.274	41.5487	3.8	3	0.117	0.07	0	EC-29
0	0	-3	3.766	1+038.23	1.17	0.00	783614.351	3119749.249	1139.387	41.5487	3.766	3	0	0.00	0	rEW=0
0	0	-3	3.713	1+040.00	1.77	0.00	783613.023	3119750.425	1139.559	41.5487	3.713	3	0	0.00	0	
0	0	-3	3.417	1+050.00	10.00	0.00	783605.539	3119757.058	1140.53	41.5487	3.417	3	0	0.00	0	
0	0	-3	3.275	1+054.81	4.81	0.00	783601.94	3119760.248	1140.997	41.5487	3.275	3	0	0.00	0	BC-30
0	0	-3	3.121	1+060.00	5.19	0.00	783597.999	3119763.621	1141.5	39.5659	3.121	3	0	0.00	0	
0	0	-3	3	1+068.73	8.73	0.00	783591.115	3119768.979	1142.347	36.2334	3	3	0	0.00	0	IP-30/X=783591.500,Y=3119769.500,R=150
0	0	-3	3	1+070.00	1.27	0.00	783590.084	3119769.729	1142.471	35.7464	3	3	0	0.00	0	
0	0	-3	0.81	1+080.00	10.00	0.00	783581.779	3119775.296	1143.441	31.9266	0.81	3	0	0.00	0	
0	0	-3	-0.062	1+082.64	2.64	0.00	783579.531	3119776.67	1143.698	30.923	-0.062	3	0	0.00	0	EC-30
0	0	-3	-0.542	1+084.09	1.45	0.00	783578.284	3119777.417	1143.838	30.923	-0.542	3	0	0.00	0	IEW=0
0	-0.117	-3	-0.927	1+085.26	1.17	0.14	783577.283	3119778.016	1143.952	30.923	-0.927	3	0.117	0.14	0	BC-31
0	-0.175	-3	-1.119	1+085.84	0.58	0.10	783576.787	3119778.317	1144.008	31.2574	-1.119	3	0.175	0.10	0	rEW=0.17
0	-0.175	-3	-2.492	1+090.00	4.16	0.73	783573.279	3119780.547	1144.424	33.6392	-2.492	3	0.175	0.73	0	
0	-0.175	-3	-3.9	1+098.77	8.77	1.53	783566.2	3119785.719	1145.364	38.664	-3.9	3	0.175	1.53	0	IP-31/X=783565.625,Y=3119785.000,R=100
0	-0.175	-3	-3.9	1+100.00	1.23	0.22	783565.244	3119786.493	1145.503	39.3688	-3.9	3	0.175	0.22	0	
0	-0.175	-3	-2.438	1+110.00	10.00	1.75	783557.843	3119793.212	1146.685	45.0984	-2.438	3	0.175	1.75	0	
0	-0.175	-3	-2.069	1+111.70	1.70	0.30	783556.656	3119794.423	1146.889	46.07	-2.069	3	0.175	0.30	0	IEW=0.17
0	-0.117	-3	-1.943	1+112.28	0.58	0.07	783556.252	3119794.844	1146.958	46.4034	-1.943	3	0.117	0.07	0	EC-31

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-1.689	1+113.45	1.17	0.00	783555.447	3119795.689	1147.098	46.4034	-1.689	3	0	0.00	0	rEW=0
0	0	-3	-0.265	1+120.00	6.55	0.00	783550.928	3119800.435	1147.883	46.4034	-0.265	3	0	0.00	0	
0	0	-3	0.114	1+121.74	1.74	0.00	783549.727	3119801.697	1148.092	46.4034	0.114	3	0	0.00	0	rEW=0
0	0	-3	1.25	1+126.97	5.23	0.00	783546.122	3119805.483	1148.719	46.4034	1.25	3	0.523	2.74	0	IEW=0
0	-0.303	-3	1.908	1+130.00	3.03	0.92	783544.032	3119807.677	1149.082	46.4034	1.908	3	0.826	2.50	0	
0	-0.95	-3	3.314	1+136.47	6.47	6.15	783539.571	3119812.363	1149.857	46.4034	3.314	3	1.473	9.53	0	BC-32
0	-1.077	-3	3.591	1+137.74	1.27	1.37	783538.736	3119813.318	1150.009	51.2626	3.591	3	1.6	2.03	0	rEW=1.6
0	-1.141	-3	3.729	1+138.38	0.64	0.73	783538.347	3119813.823	1150.086	53.6977	3.729	3	1.6	1.02	0	IP-32/X=783538.250,Y=3119813.750,R=15
0	-1.205	-3	3.868	1+139.02	0.64	0.77	783537.981	3119814.345	1150.163	56.133	3.868	3	1.6	1.02	0	rEW=1.6
0	-1.303	-3	4.081	1+140.00	0.98	1.28	783537.461	3119815.178	1150.28	59.8846	4.081	3	1.502	1.47	0	
0	-1.332	-3	4.144	1+140.29	0.29	0.39	783537.319	3119815.428	1150.315	60.9834	4.144	3	1.473	0.43	0	EC-32
0	-2.137	-3	5.894	1+148.34	8.05	17.20	783533.414	3119822.468	1151.28	60.9834	5.894	3	0.668	5.38	0	BC-33
0	-2.303	-3	6.255	1+150.00	1.66	3.82	783532.493	3119823.844	1151.479	51.4717	6.255	3	0.502	0.83	0	
0	-2.6	-3	6.9	1+152.97	2.97	7.72	783530.327	3119825.861	1151.835	34.4513	6.9	3	0.205	0.61	0	IEW=2.6
0	-2.6	-3	6.9	1+155.02	2.05	5.33	783528.533	3119826.839	1152.08	22.7239	6.9	3	0	0.00	0	rEW=0
0	-2.6	-3	6.9	1+155.29	0.27	0.70	783528.285	3119826.939	1152.111	21.1918	6.9	3	0	0.00	0	IP-33/X=783529.375,Y=3119829.750,R=10
0	-2.6	-3	6.9	1+157.60	2.31	6.01	783526.049	3119827.519	1152.39	7.9267	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.162	1+160.00	2.40	6.24	783523.655	3119827.563	1152.677	354.1742	6.162	3	0	0.00	0	Required
0	-2.6	-3	5.476	1+162.23	2.23	5.80	783521.481	3119827.093	1152.944	341.3988	5.476	3	0	0.00	0	EC-33
0	-2.6	-3	5.371	1+162.57	0.34	0.88	783521.159	3119826.985	1152.985	341.3988	5.371	3	0	0.00	0	BC-34
0	-2.6	-3	4.861	1+164.23	1.66	4.32	783519.634	3119826.326	1153.184	331.8871	4.861	3	0	0.00	0	rEW=0
0	-2.6	-3	3.6	1+168.33	4.10	10.66	783516.509	3119823.718	1153.675	308.4021	3.6	3	0.41	1.68	0	IEW=2.6
0	-2.6	-3	3.6	1+170.00	1.67	4.34	783515.585	3119822.328	1153.876	298.8281	3.6	3	0.577	0.96	0	
0	-2.6	-3	3.6	1+171.21	1.21	3.15	783515.067	3119821.235	1154.021	291.894	3.6	3	0.698	0.84	0	IP-34/X=783510.062,Y=3119823.250,R=10
0	-2.6	-3	3.6	1+174.09	2.88	7.49	783514.39	3119818.445	1154.366	275.3879	3.6	3	0.986	2.84	0	IEW=2.6
0	-2.024	-3	0.444	1+179.85	5.76	11.66	783515.483	3119812.876	1155.056	242.4122	0.444	3	1.562	9.00	0	EC-34
0	-2.009	-3	0.362	1+180.00	0.15	0.30	783515.552	3119812.743	1155.074	242.4122	0.362	3	1.577	0.24	0	
0	-1.898	-3	-0.246	1+181.11	1.11	2.11	783516.066	3119811.759	1155.207	242.4122	-0.246	3	1.688	1.87	0	BC-35
0	-1.286	-3	-3.6	1+187.23	6.12	7.87	783517.286	3119805.842	1155.941	274.2908	-3.6	3	2.3	14.08	0	rEW=2.3
0	-1.009	-3	-3.6	1+190.00	2.77	2.79	783516.735	3119803.135	1156.273	288.7183	-3.6	3	2.3	6.37	0	
0	-0.98	-3	-3.6	1+190.29	0.29	0.28	783516.639	3119802.862	1156.307	290.2256	-3.6	3	2.3	0.67	0	IP-35/X=783521.688,Y=3119801.000,R=11
0	-0.674	-3	-3.6	1+193.35	3.06	2.06	783515.198	3119800.174	1156.674	306.1626	-3.6	3	2.3	7.04	0	rEW=2.3
0	-0.062	-3	-1.266	1+199.47	6.12	0.38	783510.428	3119796.463	1157.408	338.0513	-1.266	3	1.688	10.33	0	EC-35
0	-0.009	-3	-1.064	1+200.00	0.53	0.00	783509.937	3119796.264	1157.471	338.0513	-1.064	3	1.635	0.87	0	
0	0	-3	-1.029	1+200.09	0.09	0.00	783509.852	3119796.23	1157.482	338.0513	-1.029	3	1.626	0.15	0	IEW=0
0	0	-3	-0.345	1+201.88	1.79	0.00	783508.189	3119795.56	1157.696	338.0513	-0.345	3	1.447	2.59	0	IEW=0
0	-0.812	-3	2.749	1+210.00	8.12	6.59	783500.662	3119792.527	1158.67	338.0513	2.749	3	0.635	5.16	0	
0	-1.447	-3	5.171	1+216.35	6.35	9.19	783494.772	3119790.153	1159.431	338.0513	5.171	3	0	0.00	0	rEW=0
0	-1.472	-3	5.266	1+216.60	0.25	0.37	783494.54	3119790.06	1159.461	338.0513	5.266	3	0	0.00	0	BC-36
0	-1.812	-3	6.563	1+220.00	3.40	6.16	783491.56	3119788.445	1159.868	325.064	6.563	3	0	0.00	0	
0	-1.9	-3	6.9	1+220.88	0.88	1.67	783490.85	3119787.917	1159.973	321.6838	6.9	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.9	1+223.03	2.15	4.08	783489.271	3119786.475	1160.231	313.5089	6.9	3	0	0.00	0	IP-36/X=783488.188,Y=3119787.500,R=15
0	-1.9	-3	6.9	1+225.17	2.14	4.07	783487.913	3119784.823	1160.488	305.3334	6.9	3	0	0.00	0	IEW=1.9
0	-1.472	-3	6.701	1+229.45	4.28	6.30	783485.963	3119781.02	1161.001	288.9523	6.701	3	0	0.00	0	EC-36

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.417	-3	6.675	1+230.00	0.55	0.78	783485.784	3119780.5	1161.066	288.9523	6.675	3	0	0.00	0	
0	-0.417	-3	6.211	1+240.00	10.00	4.17	783482.536	3119771.042	1162.265	288.9523	6.211	3	0	0.00	0	
0	0	-3	6.017	1+244.17	4.17	0.00	783481.184	3119767.102	1162.765	288.9523	6.017	3	0	0.00	0	IEW=0
0	0	-3	5.746	1+250.00	5.83	0.00	783479.289	3119761.584	1163.463	288.9523	5.746	3	0	0.00	0	
0	0	-3	5.282	1+260.00	10.00	0.00	783476.041	3119752.126	1164.662	288.9523	5.282	3	0	0.00	0	
0	0	-3	4.817	1+270.00	10.00	0.00	783472.793	3119742.668	1165.86	288.9523	4.817	3	0	0.00	0	
0	0	-3	4.513	1+276.56	6.56	0.00	783470.661	3119736.461	1166.643	288.9523	4.513	3	0	0.00	0	rEW=0
0	-0.117	-3	4.458	1+277.73	1.17	0.14	783470.282	3119735.358	1166.769	288.9523	4.458	3	0.117	0.14	0	BC-37
0	-0.175	-3	4.431	1+278.31	0.58	0.10	783470.094	3119734.804	1166.832	288.6181	4.431	3	0.175	0.10	0	rEW=0.17
0	-0.175	-3	4.353	1+280.00	1.69	0.30	783469.569	3119733.201	1167.014	287.6517	4.353	3	0.175	0.30	0	
0	-0.175	-3	4	1+290.00	10.00	1.75	783467.018	3119723.536	1168.095	281.922	4	3	0.175	1.75	0	
0	-0.175	-3	4	1+292.54	2.54	0.44	783466.526	3119721.049	1168.369	280.4694	4	3	0.175	0.44	0	IP-37/X=783465.438,Y=3119721.250,R=100
0	-0.175	-3	2.987	1+300.00	7.46	1.31	783465.444	3119713.665	1169.176	276.1925	2.987	3	0.175	1.31	0	
0	-0.175	-3	0.281	1+306.76	6.76	1.18	783464.943	3119706.928	1169.907	272.3211	0.281	3	0.175	1.18	0	rEW=0.17
0	-0.117	-3	0.048	1+307.34	0.58	0.07	783464.921	3119706.345	1169.969	271.9884	0.048	3	0.263	0.15	0	EC-37
0	0	-3	-0.419	1+308.51	1.17	0.00	783464.88	3119705.179	1170.096	271.9884	-0.419	3	0.439	0.51	0	IEW=0
0	0	-3	-1.017	1+310.00	1.49	0.00	783464.828	3119703.686	1170.257	271.9884	-1.017	3	0.664	0.99	0	
0	0	-3	-2.295	1+313.19	3.19	0.00	783464.718	3119700.498	1170.602	271.9884	-2.295	3	1.145	3.65	0	BC-38
0	0	-3	-5.021	1+320.00	6.81	0.00	783462.455	3119694.189	1171.338	307.4647	-5.021	3	2.171	14.78	0	
0	0	-3	-5.364	1+320.86	0.86	0.00	783461.908	3119693.53	1171.431	311.9268	-5.364	3	2.3	1.98	0	rEW=2.3
0	0	-3	-6.8	1+330.00	9.14	0.00	783453.811	3119689.88	1172.418	359.5469	-6.8	3	2.3	21.02	0	Required
0	0	-3	-6.8	1+330.07	0.07	0.00	783453.741	3119689.88	1172.426	359.9115	-6.8	3	2.3	0.16	0	IP-38/X=783454.250,Y=3119399.000,R=11
0	0	-3	-5.085	1+339.28	9.21	0.00	783445.562	3119693.506	1173.421	47.9036	-5.085	3	2.3	21.18	0	rEW=2.3
0	0	-3	-4.742	1+340.00	0.72	0.00	783445.099	3119694.053	1173.499	51.6371	-4.742	3	2.228	1.60	0	
0	0	-3	-1.418	1+346.95	6.95	0.00	783442.719	3119700.46	1174.25	87.8094	-1.418	3	1.533	10.65	0	EC-38
0	0	-3	0.041	1+350.00	3.05	0.00	783442.602	3119703.507	1174.58	87.8094	0.041	3	1.228	3.75	0	
0	0	-3	0.408	1+350.77	0.77	0.00	783442.573	3119704.273	1174.663	87.8094	0.408	3	1.152	0.89	0	IEW=0
0	-0.533	-3	2.959	1+356.10	5.33	2.84	783442.369	3119709.603	1175.239	87.8094	2.959	3	0.618	3.29	0	BC-39
0	-0.8	-3	4.234	1+358.77	2.67	2.14	783442.197	3119712.263	1175.528	84.7536	4.234	3	0.352	0.94	0	IEW=0.8
0	-0.8	-3	4.824	1+360.00	1.23	0.98	783442.069	3119713.489	1175.661	83.341	4.824	3	0.228	0.28	0	
0	-0.8	-3	5.916	1+362.28	2.28	1.82	783441.752	3119715.75	1175.907	80.7246	5.916	3	0	0.00	0	rEW=0
0	-0.8	-3	6	1+365.64	3.36	2.69	783441.1	3119719.043	1176.27	76.8771	6	3	0	0.00	0	IP-39/X=783442.000,Y=3119719.250,R=50
0	-0.8	-3	6	1+370.00	4.36	3.49	783439.927	3119723.24	1176.742	71.8818	6	3	0	0.00	0	
0	-0.8	-3	6	1+372.51	2.51	2.01	783439.085	3119725.608	1177.013	69.0015	6	3	0	0.00	0	IEW=0.8
0	-0.533	-3	6	1+375.18	2.67	1.42	783438.066	3119728.067	1177.301	65.952	6	3	0	0.00	0	EC-39
0	-0.051	-3	6	1+380.00	4.82	0.25	783436.101	3119732.469	1177.822	65.952	6	3	0	0.00	0	
0	0	-3	6	1+380.51	0.51	0.00	783435.892	3119732.937	1177.878	65.952	6	3	0	0.00	0	IEW=0
0	0	-3	6	1+390.00	9.49	0.00	783432.026	3119741.601	1178.903	65.952	6	3	0	0.00	0	
0	0	-3	6	1+399.92	9.92	0.00	783427.985	3119750.656	1179.975	65.952	6	3	0	0.00	0	IEW=0
0	-0.008	-3	6	1+400.00	0.08	0.00	783427.951	3119750.733	1179.984	65.952	6	3	0	0.00	0	
0	-0.533	-3	6	1+405.25	5.25	2.80	783425.812	3119755.527	1180.551	65.952	6	3	0	0.00	0	BC-40
0	-0.8	-3	6	1+407.92	2.67	2.14	783424.662	3119757.929	1180.84	62.8963	6	3	0	0.00	0	IEW=0.8
0	-0.8	-3	6	1+410.00	2.08	1.66	783423.675	3119759.763	1181.065	60.5095	6	3	0	0.00	0	
0	-0.8	-3	6	1+412.57	2.57	2.06	783422.355	3119761.963	1181.342	57.5692	6	3	0	0.00	0	IP-40/X=783422.812,Y=3119762.250,R=50

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.8	-3	5.879	1+417.21	4.64	3.71	783419.684	3119765.765	1181.844	52.2429	5.879	3	0	0.00	0	IEW=0.8
0	-0.933	-3	5.734	1+419.88	2.67	2.49	783417.999	3119767.825	1182.133	49.1907	5.734	3	0	0.00	0	EC-40
0	-0.939	-3	5.727	1+420.00	0.12	0.11	783417.92	3119767.915	1182.146	49.1907	5.727	3	0	0.00	0	
0	-1.44	-3	5.181	1+430.00	10.00	14.40	783411.385	3119775.484	1183.226	49.1907	5.181	3	0	0.00	0	
0	-1.583	-3	5.025	1+432.86	2.86	4.53	783409.516	3119777.649	1183.536	49.1907	5.025	3	0	0.00	0	BC-41
0	-1.9	-3	4.68	1+439.19	6.33	12.03	783404.391	3119781.27	1184.22	21.2793	4.68	3	0	0.00	0	IEW=1.9
0	-1.9	-3	4.636	1+440.00	0.81	1.54	783403.631	3119781.539	1184.307	17.7255	4.636	3	0	0.00	0	
0	-1.9	-3	4.5	1+447.30	7.30	13.87	783396.434	3119781.746	1185.096	345.5725	4.5	3	0	0.00	0	IP-41/X=783392.375,Y=3119797.500,R=13
0	-1.9	-3	4.5	1+450.00	2.70	5.13	783393.903	3119780.805	1185.388	333.6498	4.5	3	0	0.00	0	
0	-1.9	-3	2.906	1+455.05	5.05	9.59	783389.92	3119777.752	1185.934	311.392	2.906	3	0	0.00	0	rEW=0
0	-1.9	-3	2.718	1+455.40	0.35	0.67	783389.695	3119777.489	1185.972	309.8665	2.718	3	0.035	0.01	0	IEW=1.9
0	-1.44	-3	0.226	1+460.00	4.60	6.62	783387.424	3119773.512	1186.469	289.5764	0.226	3	0.495	2.28	0	
0	-1.267	-3	-0.711	1+461.73	1.73	2.19	783386.955	3119771.844	1186.656	281.9293	-0.711	3	0.668	1.16	0	EC-41
0	-1.135	-3	-1.426	1+463.05	1.32	1.50	783386.682	3119770.552	1186.798	281.9293	-1.426	3	0.8	1.06	0	BC-42
0	-0.735	-3	-3.591	1+467.05	4.00	2.94	783385.471	3119766.746	1187.231	293.3874	-3.591	3	1.2	4.80	0	rEW=1.2
0	-0.44	-3	-4.4	1+470.00	2.95	1.30	783384.105	3119764.134	1187.55	301.8393	-4.4	3	1.2	3.54	0	
0	-0.311	-3	-4.4	1+471.29	1.29	0.40	783383.389	3119763.061	1187.689	305.5353	-4.4	3	1.2	1.55	0	IP-42/X=783384.875,Y=3119762.000,R=20
0	0	-3	-4.394	1+474.40	3.11	0.00	783381.395	3119760.683	1188.025	314.4348	-4.394	3	1.2	3.73	0	IEW=0
0	0	-3	-4.377	1+475.53	1.13	0.00	783380.579	3119759.897	1188.147	317.681	-4.377	3	1.2	1.36	0	rEW=1.2
0	0	-3	-4.314	1+479.53	4.00	0.00	783377.372	3119757.517	1188.58	329.1412	-4.314	3	0.906	3.62	0	EC-42
0	0	-3	-4.306	1+480.00	0.47	0.00	783376.969	3119757.276	1188.63	329.1412	-4.306	3	0.872	0.41	0	
0	0	-3	-4.213	1+485.97	5.97	0.00	783371.841	3119754.212	1189.276	329.1412	-4.213	3	0.433	2.59	0	IEW=0
0	-0.167	-3	-4.187	1+487.64	1.67	0.28	783370.41	3119753.357	1189.456	329.1412	-4.187	3	0.311	0.52	0	BC-43
0	-0.25	-3	-4.174	1+488.47	0.83	0.21	783369.69	3119752.933	1189.546	329.8229	-4.174	3	0.25	0.21	0	rEW=0.25
0	-0.25	-3	-4.15	1+490.00	1.53	0.38	783368.362	3119752.18	1189.711	331.0725	-4.15	3	0.25	0.38	0	
0	-0.25	-3	-4	1+500.00	10.00	2.50	783359.295	3119747.983	1190.792	339.2574	-4	3	0.25	2.50	0	
0	-0.25	-3	-4	1+505.49	5.49	1.37	783354.094	3119746.243	1191.384	343.7476	-4	3	0.25	1.37	0	IP-43/X=783354.750,Y=3119744.000,R=70
0	-0.25	-3	-4	1+510.00	4.51	1.13	783349.722	3119745.12	1191.873	347.4429	-4	3	0.25	1.13	0	
0	-0.25	-3	-0.44	1+520.00	10.00	2.50	783339.839	3119743.65	1192.954	355.6282	-0.44	3	0.25	2.50	0	
0	-0.25	-3	0.598	1+522.50	2.50	0.63	783337.347	3119743.504	1193.224	357.6715	0.598	3	0.25	0.63	0	rEW=0.25
0	-0.317	-3	0.944	1+523.33	0.83	0.26	783336.518	3119743.475	1193.313	358.3517	0.944	3	0.167	0.14	0	EC-43
0	-0.452	-3	1.637	1+525.00	1.67	0.75	783334.852	3119743.427	1193.494	358.3517	1.637	3	0	0.00	0	rEW=0
0	-0.585	-3	2.32	1+526.64	1.64	0.96	783333.209	3119743.38	1193.671	358.3517	2.32	3	0	0.00	0	BC-44
0	-0.8	-3	3.428	1+529.31	2.67	2.14	783330.548	3119743.233	1193.96	355.2965	3.428	3	0	0.00	0	IEW=0.8
0	-0.8	-3	3.717	1+530.00	0.69	0.55	783329.857	3119743.171	1194.034	354.5015	3.717	3	0	0.00	0	
0	-0.8	-3	5.9	1+539.56	9.56	7.65	783320.486	3119741.354	1195.068	343.5465	5.9	3	0	0.00	0	IP-44/X=783320.000,Y=3119743.000,R=50
0	-0.8	-3	5.9	1+540.00	0.44	0.35	783320.065	3119741.227	1195.115	343.0426	5.9	3	0	0.00	0	
0	-0.8	-3	5.051	1+549.81	9.81	7.85	783311.018	3119737.465	1196.175	331.7969	5.051	3	0	0.00	0	IEW=0.8
0	-0.781	-3	5.024	1+550.00	0.19	0.15	783310.854	3119737.377	1196.196	331.5836	5.024	3	0	0.00	0	
0	-0.533	-3	4.67	1+552.48	2.48	1.32	783308.703	3119736.142	1196.464	328.741	4.67	3	0	0.00	0	EC-44
0	0	-3	3.909	1+557.81	5.33	0.00	783304.144	3119733.375	1197.04	328.741	3.909	3	0	0.00	0	IEW=0
0	0	-3	3.596	1+560.00	2.19	0.00	783302.275	3119732.24	1197.286	328.741	3.596	3	0	0.00	0	
0	0	-3	2.959	1+564.46	4.46	0.00	783298.46	3119729.925	1197.801	328.741	2.959	3	0	0.00	0	IEW=0
0	-0.554	-3	2.168	1+570.00	5.54	3.07	783293.726	3119727.051	1198.441	328.741	2.168	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.554	-3	0.741	1+580.00	10.00	15.54	783285.178	3119721.862	1199.597	328.741	0.741	3	0	0.00	0	
0	-1.611	-3	0.659	1+580.57	0.57	0.92	783284.691	3119721.566	1199.663	328.741	0.659	3	0	0.00	0	BC-45
0	-1.9	-3	0.246	1+583.46	2.89	5.49	783282.378	3119719.837	1199.997	317.6911	0.246	3	0	0.00	0	IEW=1.9
0	-1.9	-3	0.039	1+584.91	1.45	2.75	783281.356	3119718.812	1200.164	312.1601	0.039	3	0	0.00	0	IP-45/X=783280.875,Y=3119719.250,R=15
0	-1.9	-3	-0.167	1+586.36	1.45	2.76	783280.438	3119717.694	1200.332	306.6323	-0.167	3	0	0.00	0	IEW=1.9
0	-1.611	-3	-0.58	1+589.25	2.89	4.66	783278.946	3119715.224	1200.666	295.5964	-0.58	3	0	0.00	0	EC-45
0	-1.536	-3	-0.687	1+590.00	0.75	1.15	783278.622	3119714.548	1200.753	295.5964	-0.687	3	0	0.00	0	
0	-0.536	-3	-2.115	1+600.00	10.00	5.36	783274.302	3119705.529	1201.908	295.5964	-2.115	3	0	0.00	0	
0	0	-3	-2.88	1+605.36	5.36	0.00	783271.988	3119700.697	1202.527	295.5964	-2.88	3	0	0.00	0	IEW=0
0	0	-3	-3.543	1+610.00	4.64	0.00	783269.982	3119696.511	1203.064	295.5964	-3.543	3	0	0.00	0	
0	0	-3	-3.815	1+611.91	1.91	0.00	783269.158	3119694.791	1203.284	295.5964	-3.815	3	0	0.00	0	rEW=0
0	0	-3	-4.971	1+620.00	8.09	0.00	783265.662	3119687.492	1204.219	295.5964	-4.971	3	0.809	6.54	0	
0	0	-3	-5.389	1+622.93	2.93	0.00	783264.396	3119684.85	1204.558	295.5964	-5.389	3	1.102	3.23	0	BC-46
0	0	-3	-6.1	1+627.91	4.98	0.00	783261.547	3119680.797	1205.133	314.6056	-6.1	3	1.6	7.97	0	rEW=1.6
0	0	-3	-6.1	1+630.00	2.09	0.00	783259.979	3119679.414	1205.375	322.5984	-6.1	3	1.6	3.34	0	
0	0	-3	-6.1	1+630.40	0.40	0.00	783259.662	3119679.178	1205.421	324.108	-6.1	3	1.6	0.64	0	IP-46/X=783260.875,Y=3119677.500,R=15
0	0	-3	-6.1	1+632.88	2.48	0.00	783257.535	3119677.893	1205.708	333.6109	-6.1	3	1.6	3.97	0	rEW=1.6
0	0	-3	-5.483	1+634.00	1.12	0.00	783256.515	3119677.433	1205.837	337.8858	-5.483	3	1.488	1.67	0	IEW=0
0	-0.386	-3	-3.354	1+637.86	3.86	1.49	783252.793	3119676.455	1206.283	352.6295	-3.354	3	1.102	4.25	0	EC-46
0	-0.6	-3	-2.173	1+640.00	2.14	1.28	783250.67	3119676.18	1206.53	352.6295	-2.173	3	0.888	1.90	0	
0	-1.488	-3	2.728	1+648.88	8.88	13.21	783241.861	3119675.04	1207.556	352.6295	2.728	3	0	0.00	0	rEW=0
0	-1.552	-3	3.079	1+649.52	0.64	0.99	783241.229	3119674.959	1207.63	352.6295	3.079	3	0	0.00	0	BC-47
0	-1.6	-3	3.344	1+650.00	0.48	0.77	783240.753	3119674.888	1207.686	350.5116	3.344	3	0	0.00	0	
0	-1.9	-3	5	1+653.00	3.00	5.70	783237.876	3119674.057	1208.033	337.2835	5	3	0	0.00	0	IEW=1.9
0	-1.9	-3	5	1+654.75	1.75	3.33	783236.318	3119673.279	1208.234	329.6024	5	3	0	0.00	0	IP-47/X=783235.750,Y=3119674.250,R=13
0	-1.9	-3	5	1+656.49	1.74	3.31	783234.878	3119672.299	1208.436	321.9198	5	3	0	0.00	0	IEW=1.9
0	-1.742	-3	4.235	1+658.07	1.58	2.75	783233.696	3119671.25	1208.618	314.9501	4.235	3	0	0.00	0	rEW=0
0	-1.552	-3	3.314	1+659.97	1.90	2.95	783232.457	3119669.816	1208.838	306.5931	3.314	3	0.19	0.36	0	EC-47
0	-1.549	-3	3.3	1+660.00	0.03	0.05	783232.44	3119669.791	1208.841	306.5931	3.3	3	0.193	0.01	0	
0	-0.549	-3	-1.541	1+670.00	10.00	5.49	783226.478	3119661.763	1209.997	306.5931	-1.541	3	1.193	11.93	0	
0	0	-3	-4.198	1+675.49	5.49	0.00	783223.207	3119657.356	1210.631	306.5931	-4.198	3	1.742	9.56	0	IEW=0
0	0	-3	-4.427	1+675.96	0.47	0.00	783222.925	3119656.977	1210.686	306.5931	-4.427	3	1.789	0.84	0	BC-48
0	0	-3	-6.382	1+680.00	4.04	0.00	783219.936	3119654.303	1211.152	329.7399	-6.382	3	2.193	8.86	0	
0	0	-3	-6.9	1+681.07	1.07	0.00	783218.986	3119653.814	1211.274	335.8647	-6.9	3	2.3	2.46	0	rEW=2.3
0	0	-3	-6.9	1+683.63	2.56	0.00	783216.546	3119653.077	1211.556	350.5085	-6.9	3	2.3	5.89	0	IP-48/X=783217.188,Y=3119649.250,R=10
0	0	-3	-6.9	1+686.18	2.55	0.00	783213.999	3119652.98	1211.826	5.1519	-6.9	3	2.3	5.86	0	rEW=2.3
0	0	-3	-6.9	1+690.00	3.82	0.00	783210.352	3119654.033	1212.207	27.034	-6.9	3	2.3	8.79	0	
0	0	-3	-6.9	1+691.29	1.29	0.00	783209.246	3119654.69	1212.329	34.4085	-6.9	3	2.3	2.97	0	EC-48
0	0	-3	-6.9	1+691.51	0.22	0.00	783209.065	3119654.814	1212.35	34.4085	-6.9	3	2.3	0.51	0	BC-49
0	0	-3	-6.9	1+697.42	5.91	0.00	783205.426	3119659.365	1212.868	68.2965	-6.9	3	2.3	13.59	0	rEW=2.3
0	0	-3	-6.9	1+700.00	2.58	0.00	783204.79	3119661.854	1213.074	83.0562	-6.9	3	2.3	5.93	0	
0	0	-3	-6.9	1+700.38	0.38	0.00	783204.752	3119662.232	1213.103	85.233	-6.9	3	2.3	0.87	0	IP-49/X=783198.938,Y=3119661.750,R=10
0	0	-3	-6.9	1+703.34	2.96	0.00	783204.942	3119665.17	1213.322	102.164	-6.9	3	2.3	6.81	0	rEW=2.3
0	0	-3	-5.212	1+709.25	5.91	0.00	783207.779	3119670.266	1213.71	136.074	-5.212	3	1.709	10.10	0	EC-49

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-4.998	1+710.00	0.75	0.00	783208.319	3119670.786	1213.755	136.074	-4.998	3	1.634	1.23	0	
0	0	-3	-2.145	1+720.00	10.00	0.00	783215.522	3119677.723	1214.249	136.074	-2.145	3	0.634	6.34	0	
0	0	-3	-0.519	1+725.70	5.70	0.00	783219.627	3119681.677	1214.446	136.074	-0.519	3	0.064	0.36	0	IEW=0
0	-0.064	-3	-0.337	1+726.34	0.64	0.04	783220.085	3119682.118	1214.465	136.074	-0.337	3	0	0.00	0	rEW=0
0	-0.43	-3	0.708	1+730.00	3.66	1.57	783222.724	3119684.661	1214.556	136.074	0.708	3	0	0.00	0	
0	-1.43	-3	3.562	1+740.00	10.00	14.30	783229.927	3119691.598	1214.777	136.074	3.562	3	0	0.00	0	
0	-2.002	-3	5.194	1+745.72	5.72	11.45	783234.046	3119695.566	1214.903	136.074	5.194	3	0	0.00	0	BC-50
0	-2.43	-3	6.415	1+750.00	4.28	10.40	783236.407	3119699.092	1214.998	111.5493	6.415	3	0	0.00	0	
0	-2.6	-3	6.9	1+751.70	1.70	4.42	783236.894	3119700.718	1215.036	101.8122	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	1+754.69	2.99	7.77	783237.063	3119703.692	1215.109	84.6811	6.9	3	0	0.00	0	IP-50/X=783243.062,Y=3119704.250,R=10
0	-2.6	-3	6.9	1+757.68	2.99	7.77	783236.348	3119706.585	1215.227	67.5432	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.442	1+760.00	2.32	6.03	783235.222	3119708.607	1215.353	54.2532	6.442	3	0	0.00	0	Required
0	-2.6	-3	5.718	1+763.66	3.66	9.52	783232.596	3119711.124	1215.611	33.2946	5.718	3	0	0.00	0	EC-50
0	-2.6	-3	5.681	1+763.85	0.19	0.49	783232.437	3119711.228	1215.626	33.2946	5.681	3	0	0.00	0	BC-51
0	-2.6	-3	4.465	1+770.00	6.15	15.99	783226.612	3119712.86	1216.233	358.0515	4.465	3	0	0.00	0	
0	-2.6	-3	4.3	1+770.84	0.84	2.18	783225.779	3119712.797	1216.332	353.2637	4.3	3	0	0.00	0	IEW=2.6
0	-2.6	-3	4.3	1+774.33	3.49	9.07	783222.45	3119711.795	1216.781	333.2428	4.3	3	0	0.00	0	IP-51/X=783217.938,Y=3119720.750,R=10
0	-2.6	-3	4.3	1+777.65	3.32	8.63	783219.785	3119709.84	1217.221	314.2181	4.3	3	0	0.00	0	rEW=0
0	-2.6	-3	4.3	1+777.82	0.17	0.44	783219.666	3119709.715	1217.243	313.2292	4.3	3	0.017	0.00	0	IEW=2.6
0	-2.517	-3	3.117	1+780.00	2.18	5.49	783218.359	3119707.98	1217.532	300.7584	3.117	3	0.235	0.51	0	
0	-2.333	-3	0.504	1+784.81	4.81	11.22	783216.967	3119703.427	1218.169	273.2092	0.504	3	0.716	3.44	0	EC-51
0	-2.171	-3	-1.789	1+789.03	4.22	9.16	783216.73	3119699.213	1218.728	273.2092	-1.789	3	1.138	4.80	0	BC-52
0	-2.134	-3	-2.316	1+790.00	0.97	2.07	783216.645	3119698.242	1218.856	276.9151	-2.316	3	1.235	1.20	0	
0	-1.995	-3	-4.3	1+793.65	3.65	7.28	783215.771	3119694.707	1219.339	290.8587	-4.3	3	1.6	5.84	0	rEW=1.6
0	-1.906	-3	-4.3	1+795.96	2.31	4.40	783214.786	3119692.62	1219.645	299.6823	-4.3	3	1.6	3.70	0	IP-52/X=783216.312,Y=3119691.750,R=15
0	-1.818	-3	-4.3	1+798.27	2.31	4.20	783213.493	3119690.71	1219.951	308.5011	-4.3	3	1.6	3.70	0	rEW=1.6
0	-1.752	-3	-3.523	1+800.00	1.73	3.03	783212.34	3119689.421	1220.18	315.1107	-3.523	3	1.427	2.47	0	
0	-1.641	-3	-2.226	1+802.89	2.89	4.74	783210.108	3119687.59	1220.563	326.1547	-2.226	3	1.138	3.29	0	EC-52
0	-1.369	-3	0.966	1+810.00	7.11	9.73	783204.203	3119683.63	1221.505	326.1547	0.966	3	0.427	3.04	0	
0	-1.353	-3	1.154	1+810.42	0.42	0.57	783203.854	3119683.396	1221.56	326.1547	1.154	3	0.385	0.16	0	BC-53
0	-1.206	-3	2.882	1+814.27	3.85	4.64	783200.804	3119681.053	1222.07	318.8017	2.882	3	0	0.00	0	rEW=0
0	-1.2	-3	2.95	1+814.42	0.15	0.18	783200.691	3119680.954	1222.09	318.5148	2.95	3	0	0.00	0	IEW=1.2
0	-1.2	-3	3.675	1+816.04	1.62	1.94	783199.509	3119679.851	1222.305	315.4267	3.675	3	0	0.00	0	rEW=0
0	-1.2	-3	4.2	1+820.00	3.96	4.75	783196.878	3119676.891	1222.829	307.8577	4.2	3	0.396	1.57	0	
0	-1.2	-3	4.2	1+820.60	0.60	0.72	783196.514	3119676.413	1222.908	306.7102	4.2	3	0.456	0.27	0	IP-53/X=783195.062,Y=3119677.500,R=30
0	-1.2	-3	2.664	1+826.78	6.18	7.42	783193.355	3119671.115	1223.727	294.9087	2.664	3	1.074	6.64	0	IEW=1.2
0	-0.878	-3	0.888	1+830.00	3.22	2.83	783192.158	3119668.127	1224.153	288.7581	0.888	3	1.396	4.50	0	
0	-0.8	-3	0.458	1+830.78	0.78	0.62	783191.917	3119667.391	1224.257	287.2815	0.458	3	1.474	1.15	0	EC-53
0	-0.741	-3	0.133	1+831.37	0.59	0.44	783191.742	3119666.828	1224.335	287.2815	0.133	3	1.533	0.90	0	BC-54
0	0	-3	-3.954	1+838.78	7.41	0.00	783187.233	3119661.166	1225.316	329.7399	-3.954	3	2.274	16.85	0	IEW=0
0	0	-3	-4.095	1+839.04	0.26	0.00	783187.01	3119661.039	1225.351	331.2103	-4.095	3	2.3	0.60	0	rEW=2.3
0	0	-3	-4.2	1+840.00	0.96	0.00	783186.145	3119660.617	1225.478	336.7269	-4.2	3	2.3	2.21	0	
0	0	-3	-4.2	1+843.16	3.16	0.00	783183.099	3119659.844	1225.896	354.8076	-4.2	3	2.3	7.27	0	IP-54/X=783184.562,Y=3119643.750,R=10
0	0	-3	-4.24	1+847.27	4.11	0.00	783179.037	3119660.314	1226.44	18.4023	-4.24	3	2.3	9.45	0	rEW=2.3

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-4.813	1+850.00	2.73	0.00	783176.599	3119661.515	1226.802	34.0222	-4.813	3	2.3	6.28	0	existing
0	0	-3	-5.852	1+854.94	4.94	0.00	783173.337	3119665.159	1227.456	62.3311	-5.852	3	2.3	11.36	0	EC-54
0	0	-3	-5.898	1+855.16	0.22	0.00	783173.235	3119665.354	1227.485	62.3311	-5.898	3	2.3	0.51	0	BC-55
0	0	-3	-6.8	1+859.45	4.29	0.00	783172.105	3119669.462	1228.053	86.9158	-6.8	3	2.3	9.87	0	rEW=2.3
0	0	-3	-6.8	1+860.00	0.55	0.00	783172.09	3119670.01	1228.126	90.0573	-6.8	3	2.3	1.26	0	
0	0	-3	-6.8	1+861.60	1.60	0.00	783172.219	3119671.598	1228.338	99.1957	-6.8	3	2.3	3.68	0	IP-55/X=783169.750,Y=3119672.000,R=10
0	0	-3	-6.8	1+863.74	2.14	0.00	783172.785	3119673.662	1228.622	111.4822	-6.8	3	2.3	4.92	0	rEW=2.3
0	0	-3	-6.599	1+864.11	0.37	0.00	783172.927	3119674.005	1228.671	113.6094	-6.599	3	2.263	0.84	0	IEW=0
0	-0.392	-3	-4.469	1+868.03	3.92	1.54	783175.154	3119677.204	1229.19	136.0852	-4.469	3	1.871	7.33	0	EC-55
0	-0.589	-3	-3.399	1+870.00	1.97	1.16	783176.574	3119678.57	1229.451	136.0852	-3.399	3	1.674	3.30	0	
0	-0.6	-3	-3.339	1+870.11	0.11	0.07	783176.653	3119678.646	1229.465	136.0852	-3.339	3	1.663	0.18	0	BC-56
0	-0.9	-3	-1.709	1+873.11	3.00	2.70	783178.732	3119680.805	1229.863	131.7876	-1.709	3	1.363	4.09	0	IEW=0.9
0	-0.9	-3	2.034	1+880.00	6.89	6.20	783182.859	3119686.312	1230.775	121.9179	2.034	3	0.674	4.64	0	
0	-0.9	-3	5.696	1+886.74	6.74	6.07	783185.925	3119692.304	1231.668	112.2653	5.696	3	0	0.00	0	rEW=0
0	-0.9	-3	6	1+890.00	3.26	2.93	783187.036	3119695.369	1232.099	107.5942	6	3	0	0.00	0	
0	-0.9	-3	6	1+895.90	5.90	5.31	783188.398	3119701.099	1232.881	99.1503	6	3	0	0.00	0	IP-56/X=783198.312,Y=3119699.500,R=40
0	-0.9	-3	6	1+900.00	4.10	3.69	783188.842	3119705.178	1233.424	93.2705	6	3	0	0.00	0	
0	-0.9	-3	6	1+910.00	10.00	9.00	783188.165	3119715.129	1234.748	78.9465	6	3	0	0.00	0	
0	-0.9	-3	6	1+918.68	8.68	7.81	783185.593	3119723.401	1235.897	66.5138	6	3	0	0.00	0	IEW=0.9
0	-0.768	-3	6	1+920.00	1.32	1.01	783185.047	3119724.603	1236.072	64.6227	6	3	0	0.00	0	
0	-0.6	-3	6	1+921.68	1.68	1.01	783184.297	3119726.103	1236.295	62.219	6	3	0	0.00	0	EC-56
0	0	-3	6	1+927.68	6.00	0.00	783181.501	3119731.411	1237.089	62.219	6	3	0	0.00	0	IEW=0
0	0	-3	6	1+930.00	2.32	0.00	783180.419	3119733.464	1237.397	62.219	6	3	0	0.00	0	
0	0	-3	6	1+940.00	10.00	0.00	783175.758	3119742.311	1238.721	62.219	6	3	0	0.00	0	
0	0	-3	6	1+943.64	3.64	0.00	783174.061	3119745.533	1239.203	62.219	6	3	0	0.00	0	IEW=0
0	-0.636	-3	6	1+950.00	6.36	4.04	783171.097	3119751.159	1240.045	62.219	6	3	0	0.00	0	
0	-0.849	-3	6	1+952.13	2.13	1.81	783170.105	3119753.043	1240.327	62.219	6	3	0	0.00	0	BC-57
0	-1.2	-3	6	1+955.64	3.51	4.21	783168.291	3119756.046	1240.792	55.5127	6	3	0	0.00	0	IEW=1.2
0	-1.2	-3	5.134	1+957.40	1.76	2.11	783167.256	3119757.461	1241.025	52.164	5.134	3	0	0.00	0	IP-57/X=783167.625,Y=3119757.750,R=30
0	-1.2	-3	4.269	1+959.15	1.75	2.10	783166.14	3119758.814	1241.257	48.8139	4.269	3	0	0.00	0	IEW=1.2
0	-1.115	-3	3.849	1+960.00	0.85	0.95	783165.571	3119759.447	1241.37	47.1883	3.849	3	0	0.00	0	
0	-0.849	-3	2.536	1+962.66	2.66	2.26	783163.677	3119761.318	1241.722	42.1042	2.536	3	0	0.00	0	EC-57
0	-0.514	-3	0.883	1+966.01	3.35	1.72	783161.193	3119763.563	1242.165	42.1042	0.883	3	0	0.00	0	rEW=0
0	-0.115	-3	-1.087	1+970.00	3.99	0.46	783158.231	3119766.239	1242.694	42.1042	-1.087	3	0.399	1.59	0	
0	0	-3	-1.654	1+971.15	1.15	0.00	783157.379	3119767.01	1242.846	42.1042	-1.654	3	0.514	0.59	0	IEW=0
0	0	-3	-3.15	1+974.18	3.03	0.00	783155.13	3119769.042	1243.247	42.1042	-3.15	3	0.817	2.48	0	BC-58
0	0	-3	-5.04	1+978.01	3.83	0.00	783152.553	3119771.863	1243.755	53.0705	-5.04	3	1.2	4.60	0	rEW=1.2
0	0	-3	-5.983	1+979.92	1.91	0.00	783151.479	3119773.444	1244.008	58.5479	-5.983	3	1.2	2.29	0	IP-58/X=783150.750,Y=3119773.000,R=20
0	0	-3	-6.023	1+980.00	0.08	0.00	783151.438	3119773.513	1244.018	58.7778	-6.023	3	1.2	0.10	0	
0	0	-3	-6.927	1+981.83	1.83	0.00	783150.561	3119775.121	1244.261	64.0269	-6.927	3	1.2	2.20	0	rEW=1.2
0	0	-3	-5.503	1+984.58	2.75	0.00	783149.532	3119777.663	1244.625	71.8894	-5.503	3	0.926	2.55	0	IEW=0
0	-0.108	-3	-4.912	1+985.66	1.08	0.12	783149.222	3119778.704	1244.768	75.0049	-4.912	3	0.817	0.88	0	EC-58
0	-0.533	-3	-2.594	1+989.91	4.25	2.27	783148.122	3119782.809	1245.331	75.0049	-2.594	3	0.392	1.67	0	BC-59
0	-0.542	-3	-2.545	1+990.00	0.09	0.05	783148.099	3119782.895	1245.343	74.8903	-2.545	3	0.383	0.03	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.8	-3	-1.14	1+992.58	2.58	2.06	783147.357	3119785.362	1245.684	71.6097	-1.14	3	0.126	0.33	0	IEW=0.8
0	-0.828	-3	-0.455	1+993.83	1.25	1.04	783146.944	3119786.547	1245.85	70.0119	-0.455	3	0	0.00	0	rEW=0
0	-0.964	-3	2.909	2+000.00	6.17	5.95	783144.446	3119792.181	1246.667	62.1588	2.909	3	0	0.00	0	
0	-1.184	-3	6	2+010.00	10.00	11.84	783138.835	3119800.434	1247.991	49.4259	6	3	0	0.00	0	
0	-1.262	-3	6	2+013.55	3.55	4.48	783136.426	3119803.034	1248.46	44.9118	6	3	0	0.00	0	IP-59/X=783141.375,Y=3119808.000,R=45
0	-1.404	-3	6	2+020.00	6.45	9.06	783131.544	3119807.248	1249.316	36.6934	6	3	0	0.00	0	
0	-1.624	-3	3.348	2+030.00	10.00	16.24	783122.93	3119812.287	1250.64	23.9608	3.348	3	0	0.00	0	
0	-1.783	-3	1.129	2+037.18	7.18	12.80	783116.162	3119814.67	1251.591	14.8172	1.129	3	0	0.00	0	EC-59
0	-1.845	-3	0.257	2+040.00	2.82	5.20	783113.436	3119815.391	1251.964	14.8172	0.257	3	0	0.00	0	
0	-1.864	-3	-0.012	2+040.87	0.87	1.62	783112.595	3119815.613	1252.079	14.8172	-0.012	3	0	0.00	0	BC-60
0	-1.9	-3	-0.519	2+042.51	1.64	3.12	783110.988	3119815.931	1252.297	7.5897	-0.519	3	0	0.00	0	IEW=1.9
0	-1.9	-3	-0.773	2+043.33	0.82	1.56	783110.173	3119816.014	1252.405	3.9785	-0.773	3	0	0.00	0	IP-60/X=783110.188,Y=3119816.250,R=13
0	-1.9	-3	-1.026	2+044.15	0.82	1.56	783109.354	3119816.045	1252.514	0.3658	-1.026	3	0	0.00	0	IEW=1.9
0	-1.89	-3	-1.056	2+044.25	0.10	0.19	783109.257	3119816.045	1252.527	359.9383	-1.056	3	0	0.00	0	rEW=0
0	-1.736	-3	-1.533	2+045.79	1.54	2.67	783107.715	3119815.952	1252.731	353.1264	-1.533	3	0.154	0.24	0	EC-60
0	-1.357	-3	-2.705	2+049.58	3.79	5.14	783103.952	3119815.498	1253.233	353.1264	-2.705	3	0.533	2.02	0	BC-61
0	-1.315	-3	-2.835	2+050.00	0.42	0.55	783103.535	3119815.45	1253.288	353.6604	-2.835	3	0.575	0.24	0	
0	-1.09	-3	-3.529	2+052.25	2.25	2.45	783101.297	3119815.258	1253.586	356.5206	-3.529	3	0.8	1.80	0	rEW=0.8
0	-0.315	-3	-5.926	2+060.00	7.75	2.44	783093.555	3119815.455	1254.613	6.3935	-5.926	3	0.8	6.20	0	
0	0	-3	-6	2+063.15	3.15	0.00	783090.44	3119815.915	1255.03	10.4035	-6	3	0.8	2.52	0	IEW=0
0	0	-3	-6	2+065.57	2.42	0.00	783088.072	3119816.416	1255.35	13.4856	-6	3	0.8	1.94	0	IP-61/X=783087.375,Y=3119813.500,R=45
0	0	-3	-6	2+070.00	4.43	0.00	783083.822	3119817.659	1255.937	19.1259	-6	3	0.8	3.54	0	
0	0	-3	-4.43	2+078.89	8.89	0.00	783075.761	3119821.381	1257.114	30.4491	-4.43	3	0.8	7.11	0	rEW=0.8
0	0	-3	-4.213	2+080.00	1.11	0.00	783074.814	3119821.954	1257.261	31.8584	-4.213	3	0.689	0.76	0	
0	0	-3	-3.906	2+081.56	1.56	0.00	783073.506	3119822.798	1257.468	33.8384	-3.906	3	0.533	0.83	0	EC-61
0	0	-3	-2.859	2+086.89	5.33	0.00	783069.076	3119825.768	1258.174	33.8384	-2.859	3	0	0.00	0	rEW=0
0	0	-3	-2.249	2+090.00	3.11	0.00	783066.496	3119827.498	1258.586	33.8384	-2.249	3	0	0.00	0	
0	0	-3	-0.285	2+100.00	10.00	0.00	783058.19	3119833.066	1259.91	33.8384	-0.285	3	0	0.00	0	
0	0	-3	1.68	2+110.00	10.00	0.00	783049.884	3119838.635	1261.234	33.8384	1.68	3	0	0.00	0	
0	0	-3	2.737	2+115.38	5.38	0.00	783045.412	3119841.632	1261.947	33.8384	2.737	3	0	0.00	0	IEW=0
0	-0.462	-3	3.644	2+120.00	4.62	2.13	783041.578	3119844.203	1262.559	33.8384	3.644	3	0	0.00	0	
0	-1.267	-3	5.225	2+128.05	8.05	10.20	783034.891	3119848.686	1263.625	33.8384	5.225	3	0	0.00	0	BC-62
0	-1.462	-3	5.608	2+130.00	1.95	2.85	783033.202	3119849.666	1263.883	26.3891	5.608	3	0	0.00	0	
0	-1.9	-3	6.469	2+134.38	4.38	8.32	783029.049	3119851.017	1264.463	9.6482	6.469	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.9	2+140.00	5.62	10.68	783023.466	3119850.912	1265.207	348.1942	6.9	3	0	0.00	0	
0	-1.9	-3	6.9	2+140.84	0.84	1.60	783022.649	3119850.717	1265.319	344.9854	6.9	3	0	0.00	0	IP-62/X=783020.625,Y=3119858.250,R=15
0	-1.9	-3	6.9	2+147.30	6.46	12.27	783016.958	3119847.774	1266.174	320.3231	6.9	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.9	2+150.00	2.70	5.13	783015.044	3119845.87	1266.532	309.9968	6.9	3	0	0.00	0	
0	-1.9	-3	6.9	2+153.63	3.63	6.90	783013.067	3119842.831	1267.012	296.1139	6.9	3	0	0.00	0	EC-62
0	-1.9	-3	6.9	2+160.00	6.37	12.10	783010.263	3119837.111	1267.856	296.1139	6.9	3	0	0.00	0	
0	-1.9	-3	6.9	2+170.00	10.00	19.00	783005.861	3119828.132	1269.179	296.1139	6.9	3	0	0.00	0	
0	-1.9	-3	6.9	2+177.52	7.52	14.29	783002.551	3119821.38	1270.17	296.1139	6.9	3	0	0.00	0	BC-63
0	-1.9	-3	6.9	2+180.00	2.48	4.71	783001.647	3119819.07	1270.496	286.6385	6.9	3	0	0.00	0	
0	-1.9	-3	6.9	2+183.85	3.85	7.31	783001.027	3119815.278	1271.002	271.9216	6.9	3	0	0.00	0	IEW=1.9

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.9	-3	6.9	2+189.66	5.81	11.04	783001.947	3119809.581	1271.763	249.7408	6.9	3	0	0.00	0	IP-63/X=782995.625,Y=3119807.250,R=15
0	-1.9	-3	6.9	2+190.00	0.34	0.65	783002.068	3119809.263	1271.807	248.4412	6.9	3	0	0.00	0	
0	-1.9	-3	6.297	2+195.47	5.47	10.39	783004.949	3119804.653	1272.521	227.5614	6.297	3	0	0.00	0	IEW=1.9
0	-1.447	-3	4.742	2+200.00	4.53	6.55	783008.464	3119801.817	1273.111	210.2438	4.742	3	0	0.00	0	
0	-1.267	-3	4.124	2+201.80	1.80	2.28	783010.067	3119801.007	1273.345	203.3785	4.124	3	0	0.00	0	EC-63
0	-0.447	-3	1.312	2+210.00	8.20	3.67	783017.593	3119797.753	1274.409	203.3785	1.312	3	0	0.00	0	
0	0	-3	-0.22	2+214.47	4.47	0.00	783021.693	3119795.981	1274.987	203.3785	-0.22	3	0	0.00	0	IEW=0
0	0	-3	-1.086	2+216.99	2.52	0.00	783024.009	3119794.98	1275.312	203.3785	-1.086	3	0	0.00	0	rEW=0
0	0	-3	-2.118	2+220.00	3.01	0.00	783026.772	3119793.785	1275.7	203.3785	-2.118	3	0.301	0.91	0	
0	0	-3	-3.83	2+224.99	4.99	0.00	783031.353	3119791.805	1276.342	203.3785	-3.83	3	0.8	3.99	0	BC-64
0	0	-3	-5.202	2+228.99	4.00	0.00	783034.841	3119789.863	1276.856	214.8367	-5.202	3	1.2	4.80	0	rEW=1.2
0	0	-3	-5.548	2+230.00	1.01	0.00	783035.655	3119789.265	1276.985	217.7305	-5.548	3	1.2	1.21	0	
0	0	-3	-6.9	2+238.42	8.42	0.00	783041.051	3119782.882	1278.062	241.8525	-6.9	3	1.2	10.10	0	IP-64/X=783045.938,Y=3119785.500,R=20
0	0	-3	-6.9	2+240.00	1.58	0.00	783041.74	3119781.461	1278.264	246.3778	-6.9	3	1.2	1.90	0	Required
0	0	-3	-6.9	2+247.85	7.85	0.00	783043.412	3119773.842	1279.263	268.8683	-6.9	3	1.2	9.42	0	rEW=1.2
0	0	-3	-6.9	2+250.00	2.15	0.00	783043.339	3119771.695	1279.536	275.0256	-6.9	3	0.985	2.12	0	
0	0	-3	-6.9	2+251.85	1.85	0.00	783043.093	3119769.866	1279.77	280.3142	-6.9	3	0.8	1.48	0	EC-64
0	0	-3	-6.9	2+252.61	0.76	0.00	783042.956	3119769.114	1279.867	280.3142	-6.9	3	0.724	0.55	0	IEW=0
0	-0.724	-3	-6.9	2+259.85	7.24	5.24	783041.66	3119761.995	1280.782	280.3142	-6.9	3	0	0.00	0	rEW=0
0	-0.739	-3	-6.9	2+260.00	0.15	0.11	783041.634	3119761.848	1280.801	280.3142	-6.9	3	0	0.00	0	
0	-1.509	-3	-6.9	2+267.70	7.70	11.62	783040.254	3119754.269	1281.771	280.3142	-6.9	3	0	0.00	0	rEW=0
0	-1.592	-3	-6.9	2+268.53	0.83	1.32	783040.106	3119753.456	1281.876	280.3142	-6.9	3	0.083	0.07	0	BC-65
0	-1.739	-3	-6.9	2+270.00	1.47	2.56	783039.914	3119751.995	1282.06	274.6996	-6.9	3	0.23	0.34	0	
0	-1.9	-3	-6.9	2+271.61	1.61	3.06	783039.869	3119750.382	1282.262	268.5331	-6.9	3	0.391	0.63	0	IEW=1.9
0	-1.9	-3	-6.9	2+273.16	1.55	2.94	783039.987	3119748.847	1282.457	262.6499	-6.9	3	0.545	0.84	0	IP-65/X=783039.250,Y=3119748.750,R=15
0	-1.9	-3	-6.9	2+274.70	1.54	2.93	783040.262	3119747.332	1282.65	256.766	-6.9	3	0.699	1.08	0	IEW=1.9
0	-1.592	-3	-6.9	2+277.78	3.08	4.90	783041.272	3119744.42	1283.035	244.9702	-6.9	3	1.008	3.10	0	EC-65
0	-1.533	-3	-6.9	2+278.37	0.59	0.90	783041.522	3119743.885	1283.109	244.9702	-6.9	3	1.067	0.63	0	BC-66
0	-1.37	-3	-6.9	2+280.00	1.63	2.23	783042.131	3119742.372	1283.313	251.1954	-6.9	3	1.23	2.00	0	
0	-0.999	-3	-6.9	2+283.70	3.70	3.70	783042.882	3119738.755	1283.775	265.3423	-6.9	3	1.6	5.92	0	rEW=1.6
0	-0.44	-3	-6.9	2+289.30	5.60	2.46	783042.298	3119733.221	1284.472	286.7219	-6.9	3	1.6	8.96	0	IP-66/X=783047.188,Y=3119731.750,R=15
0	-0.37	-3	-6.9	2+290.00	0.70	0.26	783042.081	3119732.556	1284.559	289.3941	-6.9	3	1.6	1.12	0	
0	0	-3	-6.716	2+293.70	3.70	0.00	783040.439	3119729.256	1285.019	303.5089	-6.716	3	1.6	5.92	0	IEW=0
0	0	-3	-6.422	2+294.90	1.20	0.00	783039.736	3119728.282	1285.167	308.0984	-6.422	3	1.6	1.92	0	rEW=1.6
0	0	-3	-5.174	2+300.00	5.10	0.00	783035.971	3119724.873	1285.799	327.593	-5.174	3	1.09	5.56	0	
0	0	-3	-5.118	2+300.23	0.23	0.00	783035.773	3119724.75	1285.827	328.4808	-5.118	3	1.067	0.25	0	EC-66
0	0	-3	-2.729	2+310.00	9.77	0.00	783027.445	3119719.642	1287.032	328.4808	-2.729	3	0.09	0.88	0	
0	0	-3	-2.51	2+310.90	0.90	0.00	783026.68	3119719.174	1287.143	328.4808	-2.51	3	0	0.00	0	rEW=0
0	0	-3	-0.284	2+320.00	9.10	0.00	783018.92	3119714.414	1288.259	328.4808	-0.284	3	0	0.00	0	
0	0	-3	1.066	2+325.52	5.52	0.00	783014.215	3119711.529	1288.933	328.4808	1.066	3	0	0.00	0	IEW=0
0	-0.448	-3	2.161	2+330.00	4.48	2.01	783010.396	3119709.187	1289.479	328.4808	2.161	3	0	0.00	0	
0	-0.8	-3	3.022	2+333.52	3.52	2.82	783007.395	3119707.346	1289.907	328.4808	3.022	3	0	0.00	0	BC-67
0	-1.2	-3	4	2+337.52	4.00	4.80	783004.169	3119704.993	1290.393	319.3132	4	3	0	0.00	0	IEW=1.2
0	-1.2	-3	4.606	2+340.00	2.48	2.98	783002.372	3119703.286	1290.693	313.6305	4.606	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.2	-3	5.5	2+348.73	8.73	10.48	782997.564	3119696.058	1291.746	293.6334	5.5	3	0	0.00	0	IP-67/X=782992.562,Y=3119698.250,R=25
0	-1.2	-3	5.5	2+350.00	1.27	1.52	782997.083	3119694.877	1291.9	290.7106	5.5	3	0	0.00	0	
0	-1.2	-3	2.094	2+359.93	9.93	11.92	782995.483	3119685.143	1293.093	267.953	2.094	3	0	0.00	0	IEW=1.2
0	-1.197	-3	2.079	2+359.96	0.03	0.04	782995.484	3119685.116	1293.097	267.891	2.079	3	0	0.00	0	rEW=0
0	-1.193	-3	2.055	2+360.00	0.04	0.05	782995.486	3119685.073	1293.101	267.7924	2.055	3	0.004	0.00	0	
0	-0.8	-3	-0.128	2+363.93	3.93	3.14	782995.942	3119681.179	1293.572	258.7994	-0.128	3	0.397	1.56	0	EC-67
0	-0.664	-3	-0.883	2+365.29	1.36	0.90	782996.206	3119679.845	1293.734	258.7994	-0.883	3	0.533	0.72	0	BC-68
0	-0.397	-3	-2.363	2+367.96	2.67	1.06	782996.646	3119677.217	1294.053	262.1951	-2.363	3	0.8	2.14	0	rEW=0.8
0	-0.193	-3	-3.498	2+370.00	2.04	0.39	782996.878	3119675.187	1294.296	264.7968	-3.498	3	0.8	1.63	0	
0	0	-3	-4.569	2+371.93	1.93	0.00	782997.011	3119673.262	1294.526	267.2538	-4.569	3	0.8	1.54	0	IEW=0
0	0	-3	-5.6	2+378.04	6.11	0.00	782996.89	3119667.163	1295.252	275.0268	-5.6	3	0.8	4.89	0	IP-68/X=782998.750,Y=3119667.000,R=45
0	0	-3	-5.6	2+380.00	1.96	0.00	782996.675	3119665.21	1295.484	277.5287	-5.6	3	0.8	1.57	0	
0	0	-3	-5.643	2+388.11	8.11	0.00	782994.895	3119657.306	1296.443	287.8584	-5.643	3	0.8	6.49	0	rEW=0.8
0	0	-3	-5.656	2+390.00	1.89	0.00	782994.279	3119655.522	1296.665	290.2616	-5.656	3	0.611	1.15	0	
0	0	-3	-5.662	2+390.78	0.78	0.00	782994.003	3119654.794	1296.757	291.2505	-5.662	3	0.533	0.42	0	EC-68
0	0	-3	-5.701	2+396.11	5.33	0.00	782992.07	3119649.824	1297.384	291.2505	-5.701	3	0	0.00	0	rEW=0
0	0	-3	-5.73	2+400.00	3.89	0.00	782990.662	3119646.201	1297.841	291.2505	-5.73	3	0	0.00	0	
0	0	-3	-5.802	2+409.93	9.93	0.00	782987.063	3119636.947	1299.001	291.2505	-5.802	3	0	0.00	0	rEW=0
0	0	-3	-5.803	2+410.00	0.07	0.00	782987.037	3119636.881	1299.009	291.2505	-5.803	3	0.007	0.00	0	
0	0	-3	-5.831	2+413.93	3.93	0.00	782985.613	3119633.219	1299.467	291.2505	-5.831	3	0.4	1.57	0	BC-69
0	0	-3	-5.846	2+415.93	2.00	0.00	782984.852	3119631.372	1299.699	293.5421	-5.846	3	0.6	1.20	0	rEW=0.6
0	0	-3	-5.876	2+420.00	4.07	0.00	782983.077	3119627.711	1300.172	298.2057	-5.876	3	0.6	2.44	0	
0	0	-3	-5.9	2+428.00	8.00	0.00	782978.749	3119620.993	1301.101	307.373	-5.9	3	0.6	4.80	0	IP-69/X=782980.375,Y=3119619.750,R=50
0	0	-3	-5.9	2+430.00	2.00	0.00	782977.503	3119619.428	1301.334	309.6655	-5.9	3	0.6	1.20	0	
0	0	-3	-5.996	2+440.00	10.00	0.00	782970.396	3119612.418	1302.495	321.1236	-5.996	3	0.6	6.00	0	
0	0	-3	-5.996	2+440.07	0.07	0.00	782970.341	3119612.374	1302.503	321.2044	-5.996	3	0.6	0.04	0	rEW=0.6
0	0	-3	-6.023	2+442.07	2.00	0.00	782968.757	3119611.152	1302.736	323.4978	-6.023	3	0.4	0.80	0	EC-69
0	0	-3	-6.075	2+446.07	4.00	0.00	782965.541	3119608.773	1303.2	323.4978	-6.075	3	0	0.00	0	rEW=0
0	0	-3	-6.126	2+450.00	3.93	0.00	782962.382	3119606.435	1303.657	323.4978	-6.126	3	0	0.00	0	
0	0	-3	-6.257	2+460.00	10.00	0.00	782954.344	3119600.487	1304.818	323.4978	-6.257	3	0	0.00	0	
0	0	-3	-6.388	2+470.00	10.00	0.00	782946.306	3119594.538	1305.98	323.4978	-6.388	3	0	0.00	0	
0	0	-3	-6.518	2+480.00	10.00	0.00	782938.267	3119588.589	1307.142	323.4978	-6.518	3	0	0.00	0	
0	0	-3	-6.649	2+490.00	10.00	0.00	782930.229	3119582.641	1308.303	323.4978	-6.649	3	0	0.00	0	
0	0	-3	-6.765	2+498.84	8.84	0.00	782923.12	3119577.38	1309.33	323.4978	-6.765	3	0	0.00	0	rEW=0
0	0	-3	-6.78	2+500.00	1.16	0.00	782922.191	3119576.692	1309.465	323.4978	-6.78	3	0	0.00	0	
0	0	-3	-6.904	2+509.51	9.51	0.00	782914.546	3119571.035	1310.569	323.4978	-6.904	3	0	0.00	0	BC-70
0	0	-3	-6.911	2+510.00	0.49	0.00	782914.148	3119570.751	1310.626	325.3713	-6.911	3	0	0.00	0	
0	0	-3	-6.974	2+514.84	4.84	0.00	782909.791	3119568.685	1311.189	343.8704	-6.974	3	0	0.00	0	rEW=1.6
0	0	-3	-7	2+520.00	5.16	0.00	782904.691	3119568.123	1311.788	3.5661	-7	3	0	0.00	0	
0	0	-3	-7	2+520.51	0.51	0.00	782904.187	3119568.163	1311.846	5.4974	-7	3	0	0.00	0	IP-70/X=782903.688,Y=3119563.000,R=15
0	0	-3	-6.602	2+526.17	5.66	0.00	782898.786	3119569.743	1312.505	27.1202	-6.602	3	0	0.00	0	rEW=1.6
0	0	-3	-5.839	2+530.00	3.83	0.00	782895.633	3119571.906	1312.948	41.7652	-5.839	3	0	0.00	0	
0	0	-3	-5.54	2+531.50	1.50	0.00	782894.563	3119572.962	1313.121	47.5114	-5.54	3	0	0.00	0	EC-70
0	0	-3	-3.847	2+540.00	8.50	0.00	782888.822	3119579.23	1314.087	47.5114	-3.847	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-3.415	2+542.17	2.17	0.00	782887.359	3119580.828	1314.33	47.5114	-3.415	3	0	0.00	0	rEW=0
0	0	-3	-1.855	2+550.00	7.83	0.00	782882.068	3119586.604	1315.198	47.5114	-1.855	3	0	0.00	0	
0	0	-3	0.137	2+560.00	10.00	0.00	782875.313	3119593.978	1316.281	47.5114	0.137	3	0	0.00	0	
0	0	-3	2.128	2+570.00	10.00	0.00	782868.559	3119601.352	1317.335	47.5114	2.128	3	0	0.00	0	
0	0	-3	2.441	2+571.57	1.57	0.00	782867.498	3119602.51	1317.498	47.5114	2.441	3	0	0.00	0	IEW=0
0	-0.6	-3	3.636	2+577.57	6.00	3.60	782863.446	3119606.934	1318.115	47.5114	3.636	3	0	0.00	0	BC-71
0	-0.843	-3	4.12	2+580.00	2.43	2.05	782861.754	3119608.672	1318.362	44.0296	4.12	3	0	0.00	0	
0	-0.9	-3	4.234	2+580.57	0.57	0.51	782861.342	3119609.065	1318.42	43.214	4.234	3	0	0.00	0	IEW=0.9
0	-0.9	-3	6	2+590.00	9.43	8.49	782853.775	3119614.656	1319.361	29.7061	6	3	0	0.00	0	
0	-0.9	-3	6	2+595.37	5.37	4.83	782848.946	3119616.997	1319.886	22.0134	6	3	0	0.00	0	IP-71/X=782850.562,Y=3119621.000,R=40
0	-0.9	-3	6	2+600.00	4.63	4.17	782844.563	3119618.48	1320.332	15.3819	6	3	0	0.00	0	
0	-0.9	-3	4.488	2+610.00	10.00	9.00	782834.692	3119619.906	1321.275	1.0586	4.488	3	0	0.00	0	
0	-0.9	-3	4.459	2+610.17	0.17	0.15	782834.522	3119619.909	1321.291	0.8151	4.459	3	0	0.00	0	IEW=0.9
0	-0.6	-3	3.938	2+613.17	3.00	1.80	782831.519	3119619.839	1321.568	356.5107	3.938	3	0	0.00	0	EC-71
0	0	-3	2.895	2+619.17	6.00	0.00	782825.53	3119619.474	1322.115	356.5107	2.895	3	0	0.00	0	IEW=0
0	0	-3	2.751	2+620.00	0.83	0.00	782824.701	3119619.423	1322.19	356.5107	2.751	3	0	0.00	0	
0	0	-3	1.013	2+630.00	10.00	0.00	782814.72	3119618.815	1323.077	356.5107	1.013	3	0	0.00	0	
0	0	-3	-0.725	2+640.00	10.00	0.00	782804.739	3119618.206	1323.936	356.5107	-0.725	3	0	0.00	0	
0	0	-3	-2.463	2+650.00	10.00	0.00	782794.757	3119617.597	1324.767	356.5107	-2.463	3	0	0.00	0	
0	0	-3	-3.106	2+653.70	3.70	0.00	782791.064	3119617.372	1325.068	356.5107	-3.106	3	0	0.00	0	rEW=0
0	0	-3	-4.149	2+659.70	6.00	0.00	782785.075	3119617.007	1325.547	356.5107	-4.149	3	0	0.00	0	BC-72
0	0	-3	-4.201	2+660.00	0.30	0.00	782784.773	3119616.99	1325.57	357.0843	-4.201	3	0	0.00	0	
0	0	-3	-4.67	2+662.70	2.70	0.00	782782.074	3119616.974	1325.782	2.2408	-4.67	3	0	0.00	0	rEW=0.9
0	0	-3	-5.9	2+670.00	7.30	0.00	782774.886	3119618.14	1326.345	16.1828	-5.9	3	0	0.00	0	Required
0	0	-3	-5.9	2+674.82	4.82	0.00	782770.389	3119619.846	1326.708	25.3786	-5.9	3	0	0.00	0	IP-72/X=782768.562,Y=3119616.000,R=30
0	0	-3	-5.858	2+680.00	5.18	0.00	782765.92	3119622.461	1327.093	35.2799	-5.858	3	0	0.00	0	
0	0	-3	-3.891	2+686.93	6.93	0.00	782760.773	3119627.079	1327.594	48.5162	-3.891	3	0	0.00	0	rEW=0.9
0	0	-3	-3.039	2+689.93	3.00	0.00	782758.898	3119629.425	1327.807	54.2509	-3.039	3	0	0.00	0	EC-72
0	0	-3	-3.02	2+690.00	0.07	0.00	782758.857	3119629.481	1327.812	54.2509	-3.02	3	0	0.00	0	
0	0	-3	-1.336	2+695.93	5.93	0.00	782755.393	3119634.294	1328.225	54.2509	-1.336	3	0	0.00	0	rEW=0
0	0	-3	-0.181	2+700.00	4.07	0.00	782753.015	3119637.597	1328.503	54.2509	-0.181	3	0	0.00	0	
0	0	-3	-0.147	2+700.12	0.12	0.00	782752.945	3119637.695	1328.511	54.2509	-0.147	3	0	0.00	0	IEW=0
0	-0.6	-3	1.556	2+706.12	6.00	3.60	782749.439	3119642.564	1328.912	54.2509	1.556	3	0	0.00	0	BC-73
0	-0.9	-3	2.407	2+709.12	3.00	2.70	782747.585	3119644.92	1329.109	49.3392	2.407	3	0	0.00	0	IEW=0.9
0	-0.9	-3	2.657	2+710.00	0.88	0.79	782747.004	3119645.58	1329.166	47.8997	2.657	3	0	0.00	0	
0	-0.9	-3	5.495	2+720.00	10.00	9.00	782739.338	3119651.948	1329.802	31.5297	5.495	3	0	0.00	0	
0	-0.9	-3	5.8	2+728.55	8.55	7.70	782731.579	3119655.489	1330.323	17.5331	5.8	3	0	0.00	0	IP-73/X=782734.188,Y=3119663.750,R=35
0	-0.9	-3	5.8	2+730.00	1.45	1.30	782730.187	3119655.897	1330.409	15.1583	5.8	3	0	0.00	0	
0	-0.9	-3	5.069	2+740.00	10.00	9.00	782720.295	3119657.107	1330.992	358.7885	5.069	3	0	0.00	0	
0	-0.9	-3	3.602	2+747.98	7.98	7.18	782712.405	3119656.034	1331.455	345.7251	3.602	3	0	0.00	0	IEW=0.9
0	-0.698	-3	3.23	2+750.00	2.02	1.41	782710.463	3119655.48	1331.572	342.4187	3.23	3	0	0.00	0	
0	-0.6	-3	3.05	2+750.98	0.98	0.59	782709.533	3119655.17	1331.629	340.8121	3.05	3	0	0.00	0	EC-73
0	0	-3	1.946	2+756.98	6.00	0.00	782703.866	3119653.198	1331.977	340.8121	1.946	3	0	0.00	0	IEW=0
0	0	-3	1.391	2+760.00	3.02	0.00	782701.014	3119652.205	1332.152	340.8121	1.391	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-0.413	2+769.81	9.81	0.00	782691.749	3119648.981	1332.721	340.8121	-0.413	3	0	0.00	0	BC-74
0	0	-3	-0.448	2+770.00	0.19	0.00	782691.566	3119648.918	1332.732	340.8849	-0.448	3	0	0.00	0	
0	0	-3	-2.287	2+780.00	10.00	0.00	782682.016	3119645.96	1333.311	344.7044	-2.287	3	0	0.00	0	
0	0	-3	-3	2+790.00	10.00	0.00	782672.289	3119643.646	1333.891	348.5242	-3	3	0	0.00	0	
0	0	-3	-3	2+790.91	0.91	0.00	782671.402	3119643.468	1333.943	348.8698	-3	3	0	0.00	0	IP-74/X=782671.688,Y=3119642.000,R=150
0	0	-3	-2.576	2+800.00	9.09	0.00	782662.43	3119641.984	1334.471	352.3439	-2.576	3	0	0.00	0	
0	0	-3	-0.524	2+810.00	10.00	0.00	782652.482	3119640.983	1335.051	356.1637	-0.524	3	0	0.00	0	
0	0	-3	-0.113	2+812.00	2.00	0.00	782650.481	3119640.863	1335.167	356.9315	-0.113	3	0	0.00	0	EC-74
0	0	-3	1.401	2+819.38	7.38	0.00	782643.115	3119640.468	1335.595	356.9315	1.401	3	0	0.00	0	IEW=0
0	-0.062	-3	1.529	2+820.00	0.62	0.04	782642.492	3119640.435	1335.631	356.9315	1.529	3	0	0.00	0	
0	-0.533	-3	2.496	2+824.71	4.71	2.51	782637.789	3119640.183	1335.904	356.9315	2.496	3	0	0.00	0	BC-75
0	-0.8	-3	3.043	2+827.38	2.67	2.14	782635.136	3119639.962	1336.059	353.5361	3.043	3	0	0.00	0	IEW=0.8
0	-0.8	-3	3.581	2+830.00	2.62	2.10	782632.539	3119639.591	1336.211	350.1954	3.581	3	0	0.00	0	
0	-0.8	-3	5.634	2+840.00	10.00	8.00	782622.955	3119636.812	1336.775	337.464	5.634	3	0	0.00	0	
0	-0.8	-3	5.8	2+848.86	8.86	7.09	782615.157	3119632.635	1337.246	326.1825	5.8	3	0	0.00	0	IP-75/X=782611.062,Y=3119638.750,R=45
0	-0.8	-3	5.8	2+850.00	1.14	0.91	782614.218	3119631.988	1337.305	324.7305	5.8	3	0	0.00	0	
0	-0.8	-3	5.619	2+860.00	10.00	8.00	782606.76	3119625.358	1337.801	311.9988	5.619	3	0	0.00	0	
0	-0.8	-3	5.031	2+870.00	10.00	8.00	782600.946	3119617.247	1338.262	299.2662	5.031	3	0	0.00	0	
0	-0.8	-3	5.011	2+870.34	0.34	0.27	782600.779	3119616.947	1338.277	298.829	5.011	3	0	0.00	0	IEW=0.8
0	-0.533	-3	4.854	2+873.01	2.67	1.42	782599.564	3119614.575	1338.394	295.4362	4.854	3	0	0.00	0	EC-75
0	0	-3	4.541	2+878.34	5.33	0.00	782597.274	3119609.759	1338.62	295.4362	4.541	3	0	0.00	0	IEW=0
0	0	-3	4.444	2+880.00	1.66	0.00	782596.562	3119608.263	1338.688	295.4362	4.444	3	0	0.00	0	
0	0	-3	4.124	2+885.44	5.44	0.00	782594.225	3119603.35	1338.906	295.4362	4.124	3	0	0.00	0	BC-76
0	0	-3	3.856	2+890.00	4.56	0.00	782592.313	3119599.207	1339.08	294.1298	3.856	3	0	0.00	0	
0	0	-3	3.269	2+900.00	10.00	0.00	782588.454	3119589.982	1339.437	291.2648	3.269	3	0	0.00	0	
0	0	-3	3	2+910.00	10.00	0.00	782585.062	3119580.577	1339.76	288.4003	3	3	0	0.00	0	
0	0	-3	3	2+914.14	4.14	0.00	782583.796	3119576.635	1339.884	287.2142	3	3	0	0.00	0	IP-76/X=782581.812,Y=3119577.250,R=200
0	0	-3	3	2+920.00	5.86	0.00	782582.144	3119571.013	1340.051	285.5355	3	3	0	0.00	0	
0	0	-3	1.011	2+930.00	10.00	0.00	782579.708	3119561.315	1340.333	282.6706	1.011	3	0	0.00	0	
0	0	-3	-1.31	2+937.34	7.34	0.00	782578.229	3119554.126	1340.541	280.5678	-1.31	3	0	0.00	0	rEW=0
0	0	-3	-2.151	2+940.00	2.66	0.00	782577.759	3119551.508	1340.616	279.8058	-2.151	3	0	0.00	0	
0	0	-3	-3.048	2+942.84	2.84	0.00	782577.294	3119548.707	1340.697	278.9937	-3.048	3	0	0.00	0	EC-76
0	0	-3	-3.207	2+943.34	0.50	0.00	782577.216	3119548.213	1340.711	278.9937	-3.207	3	0	0.00	0	BC-77
0	0	-3	-4.155	2+946.34	3.00	0.00	782576.621	3119545.277	1340.796	283.9036	-4.155	3	0	0.00	0	rEW=0.9
0	0	-3	-4.364	2+947.00	0.66	0.00	782576.457	3119544.637	1340.814	284.9852	-4.364	3	0	0.00	0	Required
0	0	-3	-5.312	2+950.00	3.00	0.00	782575.558	3119541.776	1340.899	289.896	-5.312	3	0	0.00	0	
0	0	-3	-5.9	2+956.12	6.12	0.00	782572.984	3119536.232	1341.072	299.9148	-5.9	3	0	0.00	0	IP-77/X=782575.125,Y=3119535.000,R=35
0	0	-3	-5.9	2+960.00	3.88	0.00	782570.867	3119532.983	1341.182	306.2662	-5.9	3	0	0.00	0	
0	0	-3	-5.37	2+965.90	5.90	0.00	782566.993	3119528.542	1341.352	315.9249	-5.37	3	0	0.00	0	rEW=0.9
0	0	-3	-5.082	2+968.90	3.00	0.00	782564.75	3119526.55	1341.469	320.8396	-5.082	3	0	0.00	0	EC-77
0	0	-3	-4.976	2+970.00	1.10	0.00	782563.897	3119525.856	1341.521	320.8396	-4.976	3	0	0.00	0	
0	0	-3	-4.506	2+974.90	4.90	0.00	782560.098	3119522.762	1341.807	320.8396	-4.506	3	0	0.00	0	rEW=0
0	0	-3	-4.016	2+980.00	5.10	0.00	782556.143	3119519.541	1342.203	320.8396	-4.016	3	0	0.00	0	
0	0	-3	-3.056	2+990.00	10.00	0.00	782548.39	3119513.226	1343.211	320.8396	-3.056	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-2.096	3+000.00	10.00	0.00	782540.636	3119506.911	1344.259	320.8396	-2.096	3	0	0.00	0	
0	0	-3	-1.136	3+010.00	10.00	0.00	782532.882	3119500.596	1345.307	320.8396	-1.136	3	0	0.00	0	
0	0	-3	-0.176	3+020.00	10.00	0.00	782525.128	3119494.281	1346.354	320.8396	-0.176	3	0	0.00	0	
0	0	-3	0.784	3+030.00	10.00	0.00	782517.374	3119487.966	1347.402	320.8396	0.784	3	0	0.00	0	
0	0	-3	1.128	3+033.58	3.58	0.00	782514.596	3119485.703	1347.777	320.8396	1.128	3	0	0.00	0	IEW=0
0	-0.107	-3	1.23	3+034.65	1.07	0.11	782513.769	3119485.03	1347.89	320.8396	1.23	3	0	0.00	0	BC-78
0	-0.16	-3	1.281	3+035.18	0.53	0.08	782513.355	3119484.691	1347.945	320.585	1.281	3	0	0.00	0	IEW=0.16
0	-0.16	-3	1.744	3+040.00	4.82	0.77	782509.696	3119481.559	1348.45	318.2851	1.744	3	0	0.00	0	
0	-0.16	-3	2.704	3+050.00	10.00	1.60	782502.517	3119474.602	1349.498	313.5106	2.704	3	0	0.00	0	
0	-0.16	-3	3	3+060.00	10.00	1.60	782495.943	3119467.071	1350.546	308.7362	3	3	0	0.00	0	
0	-0.16	-3	3	3+062.31	2.31	0.37	782494.518	3119465.259	1350.787	307.6355	3	3	0	0.00	0	IP-78/X=782491.938,Y=3119467.250,R=120
0	-0.16	-3	3	3+070.00	7.69	1.23	782490.017	3119459.019	1351.594	303.9613	3	3	0	0.00	0	
0	-0.16	-3	-0.288	3+080.00	10.00	1.60	782484.783	3119450.502	1352.642	299.1868	-0.288	3	0	0.00	0	
0	-0.16	-3	-3.945	3+089.43	9.43	1.51	782480.514	3119442.1	1353.63	294.6859	-3.945	3	0	0.00	0	rEW=0.16
0	-0.107	-3	-4.152	3+089.96	0.53	0.06	782480.294	3119441.617	1353.685	294.4301	-4.152	3	0	0.00	0	EC-78
0	-0.103	-3	-4.167	3+090.00	0.04	0.00	782480.277	3119441.58	1353.69	294.4301	-4.167	3	0	0.00	0	
0	-0.009	-3	-4.532	3+090.94	0.94	0.01	782479.889	3119440.724	1353.788	294.4301	-4.532	3	0	0.00	0	BC-79
0	0	-3	-4.565	3+091.03	0.09	0.00	782479.853	3119440.645	1353.798	294.6801	-4.565	3	0	0.00	0	IEW=0
0	0	-3	-6.083	3+094.94	3.91	0.00	782477.883	3119437.271	1354.207	305.8907	-6.083	3	0	0.00	0	rEW=1.2
0	0	-3	-6.9	3+100.00	5.06	0.00	782474.432	3119433.589	1354.737	320.3863	-6.9	3	0	0.00	0	
0	0	-3	-6.9	3+100.10	0.10	0.00	782474.355	3119433.525	1354.748	320.6731	-6.9	3	0	0.00	0	IP-79/X=782475.812,Y=3119431.750,R=20
0	0	-3	-6.904	3+105.26	5.16	0.00	782469.988	3119430.803	1355.289	335.4558	-6.904	3	0	0.00	0	rEW=1.2
0	0	-3	-6.912	3+109.26	4.00	0.00	782466.212	3119429.516	1355.708	346.8997	-6.912	3	0	0.00	0	EC-79
0	0	-3	-6.913	3+110.00	0.74	0.00	782465.491	3119429.348	1355.785	346.8997	-6.913	3	0	0.00	0	
0	0	-3	-6.927	3+117.26	7.26	0.00	782458.42	3119427.703	1356.526	346.8997	-6.927	3	0	0.00	0	rEW=0
0	0	-3	-6.933	3+120.00	2.74	0.00	782455.751	3119427.082	1356.79	346.8997	-6.933	3	0	0.00	0	
0	0	-3	-6.952	3+130.00	10.00	0.00	782446.012	3119424.815	1357.678	346.8997	-6.952	3	0	0.00	0	
0	0	-3	-6.972	3+140.00	10.00	0.00	782436.272	3119422.548	1358.451	346.8997	-6.972	3	0	0.00	0	
0	0	-3	-6.974	3+141.10	1.10	0.00	782435.2	3119422.299	1358.529	346.8997	-6.974	3	0	0.00	0	rEW=0
0	0	-3	-6.989	3+149.10	8.00	0.00	782427.409	3119420.486	1359.053	346.8997	-6.989	3	0	0.00	0	BC-80
0	0	-3	-6.991	3+150.00	0.90	0.00	782426.531	3119420.302	1359.107	349.4789	-6.991	3	0	0.00	0	
0	0	-3	-6.997	3+153.10	3.10	0.00	782423.452	3119419.974	1359.287	358.3583	-6.997	3	0	0.00	0	rEW=1.2
0	0	-3	-7	3+157.36	4.26	0.00	782419.213	3119420.305	1359.516	10.5621	-7	3	0	0.00	0	IP-80/X=782418.875,Y=3119418.500,R=20
0	0	-3	-7	3+160.00	2.64	0.00	782416.657	3119420.958	1359.647	18.1251	-7	3	0	0.00	0	
0	0	-3	-6.187	3+161.62	1.62	0.00	782415.139	3119421.524	1359.724	22.7675	-6.187	3	0	0.00	0	rEW=1.2
0	0	-3	-4.029	3+165.62	4.00	0.00	782411.628	3119423.431	1359.9	34.2319	-4.029	3	0	0.00	0	EC-80
0	0	-3	-1.667	3+170.00	4.38	0.00	782408.007	3119425.895	1360.071	34.2319	-1.667	3	0	0.00	0	
0	0	-3	0.286	3+173.62	3.62	0.00	782405.014	3119427.931	1360.196	34.2319	0.286	3	0	0.00	0	rEW=0
0	0	-3	0.732	3+174.45	0.83	0.00	782404.33	3119428.396	1360.222	34.2319	0.732	3	0	0.00	0	IEW=0
0	-0.533	-3	3.609	3+179.78	5.33	2.84	782399.921	3119431.396	1360.373	34.2319	3.609	3	0	0.00	0	BC-81
0	-0.555	-3	3.728	3+180.00	0.22	0.12	782399.738	3119431.521	1360.379	33.9796	3.728	3	0	0.00	0	
0	-0.8	-3	5.048	3+182.45	2.45	1.96	782397.676	3119432.838	1360.436	31.1756	5.048	3	0	0.00	0	IEW=0.8
0	-0.8	-3	5.9	3+186.15	3.70	2.96	782394.44	3119434.636	1360.51	26.9325	5.9	3	0	0.00	0	IP-81/X=782394.625,Y=3119435.000,R=50
0	-0.8	-3	5.472	3+189.85	3.70	2.96	782391.079	3119436.19	1360.568	22.6884	5.472	3	0	0.00	0	IEW=0.8

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.785	-3	5.432	3+190.00	0.15	0.12	782390.944	3119436.246	1360.57	22.5209	5.432	3	0	0.00	0	
0	-0.533	-3	4.749	3+192.52	2.52	1.34	782388.593	3119437.152	1360.6	19.6307	4.749	3	0	0.00	0	EC-81
0	0	-3	3.304	3+197.85	5.33	0.00	782383.569	3119438.943	1360.638	19.6307	3.304	3	0	0.00	0	IEW=0
0	0	-3	2.722	3+200.00	2.15	0.00	782381.547	3119439.665	1360.645	19.6307	2.722	3	0	0.00	0	
0	0	-3	0.011	3+210.00	10.00	0.00	782372.129	3119443.024	1360.603	19.6307	0.011	3	0	0.00	0	
0	0	-3	-2.079	3+217.71	7.71	0.00	782364.863	3119445.616	1360.492	19.6307	-2.079	3	0	0.00	0	rEW=0
0	-0.117	-3	-2.396	3+218.88	1.17	0.14	782363.765	3119446.008	1360.469	19.6307	-2.396	3	0	0.00	0	BC-82
0	-0.175	-3	-2.554	3+219.46	0.58	0.10	782363.212	3119446.207	1360.457	19.9652	-2.554	3	0	0.00	0	rEW=0.17
0	-0.175	-3	-2.699	3+220.00	0.54	0.09	782362.708	3119446.392	1360.446	20.2729	-2.699	3	0	0.00	0	
0	-0.175	-3	-4	3+227.76	7.76	1.36	782355.541	3119449.36	1360.267	24.7186	-4	3	0	0.00	0	IP-82/X=782355.375,Y=3119449.000,R=100
0	-0.175	-3	-4	3+230.00	2.24	0.39	782353.517	3119450.319	1360.215	26.0018	-4	3	0	0.00	0	
0	-0.175	-3	-3.509	3+236.06	6.06	1.06	782348.157	3119453.138	1360.075	29.4723	-3.509	3	0	0.00	0	rEW=0.17
0	-0.117	-3	-3.455	3+236.64	0.58	0.07	782347.65	3119453.426	1360.062	29.8089	-3.455	3	0	0.00	0	EC-82
0	0	-3	-3.348	3+237.81	1.17	0.00	782346.637	3119454.006	1360.035	29.8089	-3.348	3	0	0.00	0	rEW=0
0	0	-3	-3.146	3+240.00	2.19	0.00	782344.734	3119455.096	1359.984	29.8089	-3.146	3	0	0.00	0	
0	0	-3	-2.226	3+250.00	10.00	0.00	782336.057	3119460.067	1359.753	29.8089	-2.226	3	0	0.00	0	
0	0	-3	-1.307	3+260.00	10.00	0.00	782327.38	3119465.038	1359.521	29.8089	-1.307	3	0	0.00	0	
0	0	-3	-0.387	3+270.00	10.00	0.00	782318.704	3119470.01	1359.29	29.8089	-0.387	3	0	0.00	0	
0	0	-3	0.533	3+280.00	10.00	0.00	782310.027	3119474.981	1359.059	29.8089	0.533	3	0	0.00	0	
0	0	-3	1.453	3+290.00	10.00	0.00	782301.35	3119479.952	1359.016	29.8089	1.453	3	0	0.00	0	Required
0	0	-3	2.195	3+298.07	8.07	0.00	782294.348	3119483.963	1359.461	29.8089	2.195	3	0	0.00	0	BC-83
0	0	-3	2.373	3+300.00	1.93	0.00	782292.664	3119484.915	1359.633	29.1947	2.373	3	0	0.00	0	
0	0	-3	3	3+310.00	10.00	0.00	782283.803	3119489.548	1360.745	26.0114	3	3	0	0.00	0	
0	0	-3	3	3+311.19	1.19	0.00	782282.732	3119490.066	1360.88	25.6327	3	3	0	0.00	0	IP-83/X=782282.938,Y=3119490.500,R=180
0	0	-3	2.211	3+320.00	8.81	0.00	782274.699	3119493.682	1361.879	22.8284	2.211	3	0	0.00	0	
0	0	-3	1.445	3+324.31	4.31	0.00	782270.704	3119495.308	1362.368	21.4547	1.445	3	0	0.00	0	EC-83
0	0	-3	0.434	3+330.00	5.69	0.00	782265.408	3119497.389	1363.014	21.4547	0.434	3	0	0.00	0	
0	0	-3	-1.344	3+340.00	10.00	0.00	782256.101	3119501.047	1364.148	21.4547	-1.344	3	0	0.00	0	
0	0	-3	-1.403	3+340.33	0.33	0.00	782255.791	3119501.169	1364.186	21.4547	-1.403	3	0	0.00	0	IEW=0
0	-0.117	-3	-1.611	3+341.50	1.17	0.14	782254.705	3119501.596	1364.318	21.4547	-1.611	3	0	0.00	0	BC-84
0	-0.175	-3	-1.714	3+342.08	0.58	0.10	782254.166	3119501.809	1364.384	21.789	-1.714	3	0	0.00	0	IEW=0.17
0	-0.175	-3	-3.121	3+350.00	7.92	1.39	782246.939	3119505.036	1365.282	26.325	-3.121	3	0	0.00	0	
0	-0.175	-3	-3.9	3+360.00	10.00	1.75	782238.212	3119509.911	1366.417	32.0548	-3.9	3	0	0.00	0	
0	-0.175	-3	-3.9	3+360.82	0.82	0.14	782237.519	3119510.349	1366.51	32.5245	-3.9	3	0	0.00	0	IP-84/X=782236.500,Y=3119508.750,R=100
0	-0.175	-3	-3.984	3+370.00	9.18	1.61	782230.016	3119515.633	1367.551	37.7844	-3.984	3	0	0.00	0	
0	-0.175	-3	-4.278	3+379.56	9.56	1.67	782222.754	3119521.84	1368.636	43.26	-4.278	3	0	0.00	0	IEW=0.17
0	-0.131	-3	-4.292	3+380.00	0.44	0.06	782222.432	3119522.144	1368.685	43.5138	-4.292	3	0	0.00	0	
0	-0.117	-3	-4.296	3+380.14	0.14	0.02	782222.33	3119522.24	1368.701	43.5914	-4.296	3	0	0.00	0	EC-84
0	0	-3	-4.332	3+381.31	1.17	0.00	782221.485	3119523.044	1368.834	43.5914	-4.332	3	0	0.00	0	rEW=0
0	0	-3	-4.501	3+386.79	5.48	0.00	782217.515	3119526.824	1369.456	43.5914	-4.501	3	0	0.00	0	IEW=0
0	-0.321	-3	-4.599	3+390.00	3.21	1.03	782215.189	3119529.038	1369.82	43.5914	-4.599	3	0	0.00	0	
0	-1.321	-3	-4.907	3+400.00	10.00	13.21	782207.946	3119535.933	1370.676	43.5914	-4.907	3	0	0.00	0	
0	-1.416	-3	-4.936	3+400.95	0.95	1.35	782207.258	3119536.588	1370.724	43.5914	-4.936	3	0	0.00	0	BC-85
0	-1.6	-3	-4.993	3+402.79	1.84	2.94	782205.872	3119537.791	1370.802	38.3242	-4.993	3	0	0.00	0	IEW=1.6

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.6	-3	-5.021	3+403.71	0.92	1.47	782205.14	3119538.343	1370.832	35.6975	-5.021	3	0	0.00	0	IP-85/X=782205.250,Y=3119538.500,R=20
0	-1.6	-3	-5.049	3+404.62	0.91	1.46	782204.383	3119538.861	1370.857	33.0695	-5.049	3	0	0.00	0	IEW=1.6
0	-1.416	-3	-5.106	3+406.46	1.84	2.61	782202.796	3119539.794	1370.891	27.797	-5.106	3	0	0.00	0	EC-85
0	-1.062	-3	-5.215	3+410.00	3.54	3.76	782199.664	3119541.445	1370.896	27.797	-5.215	3	0	0.00	0	
0	-0.062	-3	-5.522	3+420.00	10.00	0.62	782190.818	3119546.108	1370.757	27.797	-5.522	3	0	0.00	0	
0	0	-3	-5.541	3+420.62	0.62	0.00	782190.268	3119546.398	1370.748	27.797	-5.541	3	0	0.00	0	IEW=0
0	0	-3	-5.83	3+430.00	9.38	0.00	782181.972	3119550.772	1370.616	27.797	-5.83	3	0	0.00	0	
0	0	-3	-6.138	3+440.00	10.00	0.00	782173.126	3119555.435	1370.476	27.797	-6.138	3	0	0.00	0	
0	0	-3	-6.385	3+448.03	8.03	0.00	782166.023	3119559.18	1370.363	27.797	-6.385	3	0	0.00	0	rEW=0
0	0	-3	-6.445	3+450.00	1.97	0.00	782164.28	3119560.098	1370.335	27.797	-6.445	3	0	0.00	0	
0	0	-3	-6.631	3+456.03	6.03	0.00	782158.946	3119562.91	1370.326	27.797	-6.631	3	0	0.00	0	BC-86
0	0	-3	-6.753	3+460.00	3.97	0.00	782155.636	3119565.099	1370.431	39.1721	-6.753	3	0	0.00	0	
0	0	-3	-6.754	3+460.03	0.03	0.00	782155.613	3119565.118	1370.432	39.2576	-6.754	3	0	0.00	0	rEW=1.2
0	0	-3	-6.783	3+461.00	0.97	0.00	782154.877	3119565.749	1370.471	42.0351	-6.783	3	0	0.00	0	Required
0	0	-3	-6.8	3+464.29	3.29	0.00	782152.625	3119568.143	1370.642	51.4614	-6.8	3	0	0.00	0	IP-86/X=782151.188,Y=3119567.000,R=20
0	0	-3	-5.97	3+468.55	4.26	0.00	782150.345	3119571.732	1370.955	63.6656	-5.97	3	0	0.00	0	rEW=1.2
0	0	-3	-5.172	3+470.00	1.45	0.00	782149.749	3119573.053	1371.084	67.8182	-5.172	3	0	0.00	0	
0	0	-3	-4.374	3+471.45	1.45	0.00	782149.251	3119574.415	1371.224	71.9736	-4.374	3	0	0.00	0	IEW=0
0	-0.11	-3	-3.768	3+472.55	1.10	0.12	782148.939	3119575.472	1371.332	75.13	-3.768	3	0	0.00	0	EC-86
0	-0.8	-3	0.03	3+479.45	6.90	5.52	782147.168	3119582.141	1372.008	75.13	0.03	3	0	0.00	0	BC-87
0	-0.855	-3	0.333	3+480.00	0.55	0.47	782147.022	3119582.668	1372.062	74.0795	0.333	3	0	0.00	0	
0	-0.91	-3	0.636	3+480.55	0.55	0.50	782146.867	3119583.196	1372.116	73.0286	0.636	3	0	0.00	0	rEW=0
0	-1.2	-3	2.232	3+483.45	2.90	3.48	782145.887	3119585.924	1372.4	67.4903	2.232	3	0	0.00	0	IEW=1.2
0	-1.2	-3	5.838	3+490.00	6.55	7.86	782142.742	3119591.655	1373.042	54.9803	5.838	3	0	0.00	0	
0	-1.2	-3	5.9	3+495.45	5.45	6.54	782139.231	3119595.807	1373.574	44.5814	5.9	3	0	0.00	0	IP-87/X=782142.625,Y=3119599.250,R=30
0	-1.2	-3	5.9	3+500.00	4.55	5.46	782135.756	3119598.746	1374.021	35.8809	5.9	3	0	0.00	0	
0	-1.2	-3	2.54	3+507.44	7.44	8.93	782129.252	3119602.318	1374.75	21.6727	2.54	3	0	0.00	0	IEW=1.2
0	-0.944	-3	1.248	3+510.00	2.56	2.42	782126.836	3119603.161	1375.001	16.7841	1.248	3	0	0.00	0	
0	-0.8	-3	0.522	3+511.44	1.44	1.15	782125.449	3119603.544	1375.142	14.0362	0.522	3	0	0.00	0	EC-87
0	-0.552	-3	-0.727	3+513.92	2.48	1.37	782123.046	3119604.145	1375.385	14.0362	-0.727	3	0	0.00	0	rEW=0
0	-0.019	-3	-3.417	3+519.25	5.33	0.10	782117.872	3119605.438	1375.907	14.0362	-3.417	3	0	0.00	0	BC-88
0	0	-3	-3.512	3+519.44	0.19	0.00	782117.689	3119605.485	1375.926	14.3076	-3.512	3	0	0.00	0	IEW=0
0	0	-3	-3.795	3+520.00	0.56	0.00	782117.147	3119605.627	1375.98	15.1101	-3.795	3	0	0.00	0	
0	0	-3	-4.762	3+521.92	1.92	0.00	782115.309	3119606.171	1376.169	17.856	-4.762	3	0	0.00	0	rEW=0.8
0	0	-3	-5.9	3+526.64	4.72	0.00	782110.914	3119607.879	1376.631	24.6141	-5.9	3	0	0.00	0	IP-88/X=782110.625,Y=3119607.250,R=40
0	0	-3	-5.43	3+530.00	3.36	0.00	782107.917	3119609.407	1376.96	29.4341	-5.43	3	0	0.00	0	
0	0	-3	-4.725	3+531.35	1.35	0.00	782106.75	3119610.092	1377.092	31.3725	-4.725	3	0	0.00	0	rEW=0.8
0	0	-3	-3.338	3+534.02	2.67	0.00	782104.52	3119611.556	1377.354	35.1944	-3.338	3	0	0.00	0	EC-88
0	0	-3	-1.809	3+536.96	2.94	0.00	782102.12	3119613.249	1377.642	35.1944	-1.809	3	0	0.00	0	IEW=0
0	-0.24	-3	-0.562	3+539.35	2.39	0.57	782100.161	3119614.63	1377.876	35.1944	-0.562	3	0	0.00	0	rEW=0
0	-0.304	-3	-0.226	3+540.00	0.65	0.20	782099.633	3119615.003	1377.94	35.1944	-0.226	3	0	0.00	0	
0	-0.533	-3	0.966	3+542.29	2.29	1.22	782097.761	3119616.322	1378.164	35.1944	0.966	3	0	0.00	0	BC-89
0	-0.8	-3	2.354	3+544.96	2.67	2.14	782095.54	3119617.802	1378.426	32.1392	2.354	3	0	0.00	0	IEW=0.8
0	-0.8	-3	4.978	3+550.00	5.04	4.03	782091.141	3119620.265	1378.919	26.3595	4.978	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.8	-3	5.9	3+556.52	6.52	5.22	782085.132	3119622.77	1379.558	18.8941	5.9	3	0	0.00	0	IP-89/X=782085.812,Y=3119624.750,R=50
0	-0.8	-3	5.9	3+560.00	3.48	2.78	782081.798	3119623.783	1379.899	14.9003	5.9	3	0	0.00	0	
0	-0.8	-3	5.043	3+568.07	8.07	6.46	782073.863	3119625.221	1380.69	5.6494	5.043	3	0	0.00	0	IEW=0.8
0	-0.607	-3	4.801	3+570.00	1.93	1.17	782071.942	3119625.374	1380.879	3.441	4.801	3	0	0.00	0	
0	-0.533	-3	4.708	3+570.74	0.74	0.39	782071.208	3119625.413	1380.951	2.6011	4.708	3	0	0.00	0	EC-89
0	0	-3	4.037	3+576.07	5.33	0.00	782065.88	3119625.655	1381.473	2.6011	4.037	3	0	0.00	0	IEW=0
0	0	-3	3.543	3+580.00	3.93	0.00	782061.958	3119625.834	1381.858	2.6011	3.543	3	0	0.00	0	
0	0	-3	2.285	3+590.00	10.00	0.00	782051.968	3119626.287	1382.838	2.6011	2.285	3	0	0.00	0	
0	0	-3	1.028	3+600.00	10.00	0.00	782041.978	3119626.741	1383.817	2.6011	1.028	3	0	0.00	0	
0	0	-3	-0.23	3+610.00	10.00	0.00	782031.989	3119627.195	1384.797	2.6011	-0.23	3	0	0.00	0	
0	0	-3	-1.487	3+620.00	10.00	0.00	782021.999	3119627.649	1385.777	2.6011	-1.487	3	0	0.00	0	
0	0	-3	-2.745	3+630.00	10.00	0.00	782012.009	3119628.103	1386.756	2.6011	-2.745	3	0	0.00	0	
0	0	-3	-4.003	3+640.00	10.00	0.00	782002.019	3119628.557	1387.736	2.6011	-4.003	3	0	0.00	0	
0	0	-3	-5.201	3+649.53	9.53	0.00	781992.499	3119628.989	1388.67	2.6011	-5.201	3	0	0.00	0	rEW=0
0	0	-3	-5.26	3+650.00	0.47	0.00	781992.03	3119629.01	1388.716	2.6011	-5.26	3	0	0.00	0	
0	0	-3	-6.207	3+657.53	7.53	0.00	781984.508	3119629.352	1389.453	2.6011	-6.207	3	0	0.00	0	BC-90
0	0	-3	-6.518	3+660.00	2.47	0.00	781982.055	3119629.616	1389.695	9.6776	-6.518	3	0	0.00	0	
0	0	-3	-6.71	3+661.53	1.53	0.00	781980.558	3119629.93	1389.845	14.0606	-6.71	3	0	0.00	0	rEW=1.2
0	0	-3	-6.9	3+665.80	4.27	0.00	781976.562	3119631.398	1390.263	26.2793	-6.9	3	0	0.00	0	IP-90/X=781975.750,Y=3119629.750,R=20
0	0	-3	-6.162	3+670.00	4.20	0.00	781973.014	3119633.641	1390.675	38.3265	-6.162	3	0	0.00	0	
0	0	-3	-6.131	3+670.06	0.06	0.00	781972.967	3119633.678	1390.681	38.4979	-6.131	3	0	0.00	0	rEW=1.2
0	0	-3	-4.093	3+674.06	4.00	0.00	781970.108	3119636.461	1391.073	49.946	-4.093	3	0	0.00	0	EC-90
0	0	-3	-1.252	3+679.64	5.58	0.00	781966.519	3119640.73	1391.619	49.946	-1.252	3	0	0.00	0	IEW=0
0	-0.036	-3	-1.067	3+680.00	0.36	0.01	781966.286	3119641.008	1391.654	49.946	-1.067	3	0	0.00	0	
0	-0.242	-3	-0.018	3+682.06	2.06	0.50	781964.96	3119642.585	1391.856	49.946	-0.018	3	0	0.00	0	rEW=0
0	-1.036	-3	4.028	3+690.00	7.94	8.23	781959.85	3119648.662	1392.634	49.946	4.028	3	0	0.00	0	
0	-1.087	-3	4.288	3+690.51	0.51	0.55	781959.522	3119649.053	1392.684	49.946	4.288	3	0	0.00	0	BC-91
0	-1.6	-3	6.9	3+695.64	5.13	8.21	781955.757	3119652.516	1393.187	35.2579	6.9	3	0	0.00	0	IEW=1.6
0	-1.6	-3	6.9	3+698.20	2.56	4.10	781953.576	3119653.858	1393.437	27.9168	6.9	3	0	0.00	0	IP-91/X=781954.312,Y=3119655.250,R=20
0	-1.6	-3	6.9	3+700.00	1.80	2.88	781951.949	3119654.628	1393.614	22.7585	6.9	3	0	0.00	0	Required
0	-1.6	-3	6.9	3+700.76	0.76	1.22	781951.241	3119654.909	1393.688	20.5762	6.9	3	0	0.00	0	IEW=1.6
0	-1.087	-3	6.714	3+705.89	5.13	5.58	781946.261	3119656.079	1394.191	5.88	6.714	3	0	0.00	0	EC-91
0	-0.676	-3	6.565	3+710.00	4.11	2.78	781942.172	3119656.5	1394.593	5.88	6.565	3	0	0.00	0	
0	0	-3	6.32	3+716.76	6.76	0.00	781935.445	3119657.193	1395.256	5.88	6.32	3	0	0.00	0	IEW=0
0	0	-3	6.202	3+720.00	3.24	0.00	781932.225	3119657.525	1395.573	5.88	6.202	3	0	0.00	0	
0	0	-3	5.839	3+730.00	10.00	0.00	781922.277	3119658.549	1396.506	5.88	5.839	3	0	0.00	0	
0	0	-3	5.477	3+740.00	10.00	0.00	781912.33	3119659.574	1397.307	5.88	5.477	3	0	0.00	0	
0	0	-3	5.298	3+744.92	4.92	0.00	781907.439	3119660.077	1397.652	5.88	5.298	3	0	0.00	0	IEW=0
0	-0.508	-3	5.114	3+750.00	5.08	2.58	781902.383	3119660.598	1397.974	5.88	5.114	3	0	0.00	0	
0	-0.533	-3	5.105	3+750.25	0.25	0.13	781902.134	3119660.624	1397.988	5.88	5.105	3	0	0.00	0	BC-92
0	-0.8	-3	5.008	3+752.92	2.67	2.14	781899.478	3119660.825	1398.143	2.8235	5.008	3	0	0.00	0	IEW=0.8
0	-0.8	-3	4.9	3+758.73	5.81	4.65	781893.673	3119660.774	1398.445	356.1675	4.9	3	0	0.00	0	IP-92/X=781893.625,Y=3119661.500,R=50
0	-0.8	-3	4.9	3+760.00	1.27	1.02	781892.403	3119660.673	1398.505	354.7075	4.9	3	0	0.00	0	
0	-0.8	-3	3.254	3+764.53	4.53	3.62	781887.914	3119660.051	1398.702	349.5126	3.254	3	0	0.00	0	IEW=0.8

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.533	-3	1.784	3+767.20	2.67	1.42	781885.306	3119659.496	1398.805	346.4589	1.784	3	0	0.00	0	EC-92
0	-0.461	-3	1.386	3+767.92	0.72	0.33	781884.606	3119659.328	1398.831	346.4589	1.386	3	0	0.00	0	rEW=0
0	-0.253	-3	0.239	3+770.00	2.08	0.53	781882.584	3119658.841	1398.903	346.4589	0.239	3	0	0.00	0	
0	-0.061	-3	-0.82	3+771.92	1.92	0.12	781880.717	3119658.391	1398.964	346.4589	-0.82	3	0	0.00	0	BC-93
0	0	-3	-1.158	3+772.53	0.61	0.00	781880.12	3119658.251	1398.982	347.1617	-1.158	3	0	0.00	0	lEW=0
0	0	-3	-1.923	3+773.92	1.39	0.00	781878.764	3119657.962	1399.022	348.7505	-1.923	3	0	0.00	0	rEW=0.6
0	0	-3	-4.9	3+780.00	6.08	0.00	781872.743	3119657.141	1399.166	355.7183	-4.9	3	0	0.00	0	
0	0	-3	-4.9	3+783.02	3.02	0.00	781869.732	3119657.006	1399.219	359.1726	-4.9	3	0	0.00	0	IP-93/X=781869.750,Y=3119655.750,R=50
0	0	-3	-4.9	3+786.14	3.12	0.00	781866.603	3119657.059	1399.261	2.7593	-4.9	3	0	0.00	0	lEW=0
0	-0.386	-3	-4.87	3+790.00	3.86	1.49	781862.763	3119657.393	1399.295	7.1773	-4.87	3	0	0.00	0	
0	-0.597	-3	-4.851	3+792.11	2.11	1.26	781860.676	3119657.7	1399.305	9.5948	-4.851	3	0	0.00	0	rEW=0.6
0	-0.797	-3	-4.833	3+794.11	2.00	1.59	781858.711	3119658.074	1399.309	11.8887	-4.833	3	0	0.00	0	EC-93
0	-0.878	-3	-4.826	3+794.92	0.81	0.71	781857.919	3119658.241	1399.309	11.8887	-4.826	3	0	0.00	0	BC-94
0	-1.197	-3	-4.797	3+798.11	3.19	3.82	781854.762	3119658.697	1399.3	4.5771	-4.797	3	0	0.00	0	rEW=0
0	-1.2	-3	-4.796	3+798.14	0.03	0.04	781854.728	3119658.7	1399.3	4.4989	-4.796	3	0	0.00	0	lEW=1.2
0	-1.2	-3	-4.782	3+799.76	1.62	1.94	781853.119	3119658.775	1399.291	0.8067	-4.782	3	0	0.00	0	IP-94/X=781853.125,Y=3119659.250,R=25
0	-1.2	-3	-4.779	3+800.00	0.24	0.29	781852.874	3119658.777	1399.289	0.2452	-4.779	3	0	0.00	0	
0	-1.2	-3	-4.767	3+801.37	1.37	1.64	781851.509	3119658.745	1399.278	357.1156	-4.767	3	0	0.00	0	lEW=1.2
0	-0.953	-3	-4.738	3+804.59	3.22	3.07	781848.306	3119658.376	1399.241	349.7218	-4.738	3	0	0.00	0	EC-94
0	-0.537	-3	-4.689	3+810.00	5.41	2.91	781842.983	3119657.411	1399.149	349.7218	-4.689	3	0	0.00	0	
0	-0.486	-3	-4.683	3+810.67	0.67	0.33	781842.327	3119657.292	1399.135	349.7218	-4.683	3	0	0.00	0	rEW=0
0	-0.345	-3	-4.666	3+812.50	1.83	0.63	781840.523	3119656.965	1399.093	349.7218	-4.666	3	0	0.00	0	BC-95
0	-0.275	-3	-4.658	3+813.42	0.92	0.25	781839.623	3119656.808	1399.07	350.5967	-4.658	3	0	0.00	0	rEW=0.28
0	-0.275	-3	-4.6	3+820.00	6.58	1.81	781833.082	3119656.091	1398.874	356.8835	-4.6	3	0	0.00	0	
0	-0.275	-3	-4.6	3+823.40	3.40	0.94	781829.689	3119656.002	1398.75	0.1251	-4.6	3	0	0.00	0	IP-95/X=781829.688,Y=3119655.000,R=60
0	-0.275	-3	-2.952	3+830.00	6.60	1.81	781823.098	3119656.38	1398.465	6.4326	-2.952	3	0	0.00	0	
0	-0.275	-3	-1.081	3+833.37	3.37	0.93	781819.758	3119656.852	1398.297	9.6542	-1.081	3	0	0.00	0	lEW=0.28
0	-0.271	-3	-0.572	3+834.29	0.92	0.25	781818.859	3119657.012	1398.248	10.5247	-0.572	3	0	0.00	0	EC-95
0	-0.27	-3	-0.384	3+834.63	0.34	0.09	781818.525	3119657.074	1398.23	10.5247	-0.384	3	0	0.00	0	BC-96
0	-0.248	-3	2.595	3+840.00	5.37	1.33	781813.218	3119657.912	1397.922	7.4477	2.595	3	0	0.00	0	
0	-0.221	-3	4	3+846.49	6.49	1.43	781806.765	3119658.544	1397.498	3.732	4	3	0	0.00	0	IP-96/X=781806.812,Y=3119659.250,R=100
0	-0.207	-3	4	3+850.00	3.51	0.73	781803.255	3119658.711	1397.244	1.7186	4	3	0	0.00	0	
0	-0.175	-3	1.454	3+857.76	7.76	1.36	781795.5	3119658.643	1396.626	357.274	1.454	3	0	0.00	0	lEW=0.17
0	-0.117	-3	1.252	3+858.34	0.58	0.07	781794.918	3119658.615	1396.577	356.942	1.252	3	0	0.00	0	EC-96
0	0	-3	0.846	3+859.51	1.17	0.00	781793.753	3119658.552	1396.479	356.942	0.846	3	0	0.00	0	rEW=0
0	0	-3	0.674	3+860.00	0.49	0.00	781793.26	3119658.526	1396.439	356.942	0.674	3	0	0.00	0	
0	0	-3	-0.924	3+864.60	4.60	0.00	781788.67	3119658.281	1396.054	356.942	-0.924	3	0	0.00	0	rEW=0
0	0	-3	-2.779	3+869.93	5.33	0.00	781783.345	3119657.996	1395.609	356.942	-2.779	3	0	0.00	0	BC-97
0	0	-3	-2.803	3+870.00	0.07	0.00	781783.279	3119657.993	1395.603	357.0422	-2.803	3	0	0.00	0	
0	0	-3	-3.706	3+872.60	2.60	0.00	781780.683	3119657.944	1395.386	0.7621	-3.706	3	0	0.00	0	rEW=0.8
0	0	-3	-5.9	3+880.00	7.40	0.00	781773.332	3119658.724	1394.768	11.3658	-5.9	3	0	0.00	0	
0	0	-3	-5.9	3+883.39	3.39	0.00	781770.041	3119659.533	1394.485	16.2216	-5.9	3	0	0.00	0	IP-97/X=781769.375,Y=3119657.250,R=40
0	0	-3	-5.373	3+890.00	6.61	0.00	781763.875	3119661.894	1393.933	25.69	-5.373	3	0	0.00	0	
0	0	-3	-4.334	3+894.18	4.18	0.00	781760.207	3119663.901	1393.584	31.6818	-4.334	3	0	0.00	0	rEW=0.8

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-3.672	3+896.85	2.67	0.00	781757.983	3119665.378	1393.361	35.5094	-3.672	3	0	0.00	0	EC-97
0	0	-3	-2.89	3+900.00	3.15	0.00	781755.419	3119667.208	1393.098	35.5094	-2.89	3	0	0.00	0	
0	0	-3	-2.348	3+902.18	2.18	0.00	781753.642	3119668.476	1392.915	35.5094	-2.348	3	0	0.00	0	rEW=0
0	0	-3	-0.407	3+910.00	7.82	0.00	781747.279	3119673.016	1392.262	35.5094	-0.407	3	0	0.00	0	
0	0	-3	2.076	3+920.00	10.00	0.00	781739.139	3119678.825	1391.427	35.5094	2.076	3	0	0.00	0	
0	0	-3	2.702	3+922.52	2.52	0.00	781737.085	3119680.291	1391.217	35.5094	2.702	3	0	0.00	0	IEW=0
0	-0.748	-3	4.559	3+930.00	7.48	5.60	781730.999	3119684.633	1390.668	35.5094	4.559	3	0	0.00	0	
0	-1.067	-3	5.351	3+933.19	3.19	3.40	781728.402	3119686.486	1390.508	35.5094	5.351	3	0	0.00	0	BC-98
0	-1.6	-3	6.675	3+938.52	5.33	8.53	781723.704	3119688.97	1390.343	20.2308	6.675	3	0	0.00	0	IEW=1.6
0	-1.6	-3	6.7	3+940.00	1.48	2.37	781722.301	3119689.429	1390.32	16.0009	6.7	3	0	0.00	0	Required
0	-1.6	-3	6.7	3+941.34	1.34	2.14	781721.002	3119689.755	1390.307	12.1634	6.7	3	0	0.00	0	IP-98/X=781721.375,Y=3119691.500,R=20
0	-1.6	-3	6.644	3+944.16	2.82	4.51	781718.216	3119690.153	1390.308	4.0944	6.644	3	0	0.00	0	IEW=1.6
0	-1.067	-3	3.696	3+949.49	5.33	5.69	781712.904	3119689.823	1390.406	348.8039	3.696	3	0	0.00	0	EC-98
0	-1.016	-3	3.414	3+950.00	0.51	0.52	781712.403	3119689.724	1390.422	348.8039	3.414	3	0	0.00	0	
0	-0.786	-3	2.145	3+952.30	2.30	1.81	781710.151	3119689.278	1390.509	348.8039	2.145	3	0	0.00	0	rEW=0
0	-0.016	-3	-2.114	3+960.00	7.70	0.12	781702.594	3119687.783	1390.975	348.8039	-2.114	3	0	0.00	0	
0	0	-3	-2.2	3+960.16	0.16	0.00	781702.44	3119687.752	1390.987	348.8039	-2.2	3	0	0.00	0	IEW=0
0	0	-3	-3.789	3+963.03	2.87	0.00	781699.621	3119687.194	1391.231	348.8039	-3.789	3	0	0.00	0	BC-99
0	0	-3	-6.7	3+968.30	5.27	0.00	781694.379	3119687.089	1391.776	8.9166	-6.7	3	0	0.00	0	rEW=1.6
0	0	-3	-6.7	3+970.00	1.70	0.00	781692.714	3119687.448	1391.978	15.426	-6.7	3	0	0.00	0	
0	0	-3	-6.7	3+970.93	0.93	0.00	781691.826	3119687.723	1392.095	18.9773	-6.7	3	0	0.00	0	IP-99/X=781691.062,Y=3119685.500,R=15
0	0	-3	-6.7	3+973.56	2.63	0.00	781689.423	3119688.793	1392.444	29.0375	-6.7	3	0	0.00	0	rEW=1.6
0	0	-3	-6.618	3+978.83	5.27	0.00	781685.358	3119692.097	1393.19	49.1513	-6.618	3	0	0.00	0	EC-99
0	0	-3	-6.599	3+980.00	1.17	0.00	781684.592	3119692.982	1393.356	49.1513	-6.599	3	0	0.00	0	
0	0	-3	-6.45	3+989.56	9.56	0.00	781678.337	3119700.216	1394.711	49.1513	-6.45	3	0	0.00	0	rEW=0
0	0	-3	-6.443	3+990.00	0.44	0.00	781678.052	3119700.547	1394.774	49.1513	-6.443	3	0	0.00	0	
0	0	-3	-6.401	3+992.71	2.71	0.00	781676.282	3119702.593	1395.158	49.1513	-6.401	3	0	0.00	0	IEW=0
0	-0.729	-3	-6.287	4+000.00	7.29	5.31	781671.511	3119708.111	1396.191	49.1513	-6.287	3	0	0.00	0	
0	-0.922	-3	-6.257	4+001.93	1.93	1.78	781670.249	3119709.571	1396.465	49.1513	-6.257	3	0	0.00	0	BC-100
0	-1.2	-3	-6.214	4+004.71	2.78	3.34	781668.32	3119711.566	1396.859	42.7874	-6.214	3	0	0.00	0	IEW=1.2
0	-1.2	-3	-6.192	4+006.10	1.39	1.67	781667.275	3119712.48	1397.056	39.6051	-6.192	3	0	0.00	0	IP-100/X=781667.500,Y=3119712.750,R=25
0	-1.2	-3	-6.17	4+007.48	1.38	1.66	781666.181	3119713.336	1397.252	36.4212	-6.17	3	0	0.00	0	IEW=1.2
0	-0.948	-3	-6.131	4+010.00	2.52	2.39	781664.085	3119714.725	1397.609	30.656	-6.131	3	0	0.00	0	
0	-0.922	-3	-6.127	4+010.26	0.26	0.24	781663.863	3119714.856	1397.646	30.0686	-6.127	3	0	0.00	0	EC-100
0	-0.66	-3	-6.086	4+012.88	2.62	1.73	781661.596	3119716.168	1398.017	30.0686	-6.086	3	0	0.00	0	rEW=0
0	-0.06	-3	-5.992	4+018.88	6.00	0.36	781656.403	3119719.175	1398.867	30.0686	-5.992	3	0	0.00	0	BC-101
0	0	-3	-5.983	4+019.48	0.60	0.00	781655.885	3119719.482	1398.953	31.2225	-5.983	3	0	0.00	0	IEW=0
0	0	-3	-5.975	4+020.00	0.52	0.00	781655.446	3119719.753	1399.026	32.2078	-5.975	3	0	0.00	0	
0	0	-3	-5.945	4+021.88	1.88	0.00	781653.888	3119720.804	1399.293	35.7977	-5.945	3	0	0.00	0	rEW=0.9
0	0	-3	-5.9	4+027.75	5.87	0.00	781649.496	3119724.677	1400.123	46.9991	-5.9	3	0	0.00	0	IP-101/X=781648.500,Y=3119723.750,R=30
0	0	-3	-5.9	4+030.00	2.25	0.00	781648.021	3119726.382	1400.444	51.3059	-5.9	3	0	0.00	0	
0	0	-3	-4.645	4+033.61	3.61	0.00	781645.939	3119729.329	1400.955	58.2013	-4.645	3	0	0.00	0	rEW=0.9
0	0	-3	-3.351	4+036.61	3.00	0.00	781644.487	3119731.955	1401.381	63.939	-3.351	3	0	0.00	0	EC-101
0	0	-3	-1.971	4+039.81	3.20	0.00	781643.081	3119734.83	1401.834	63.939	-1.971	3	0	0.00	0	IEW=0

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.019	-3	-1.889	4+040.00	0.19	0.00	781642.998	3119735.001	1401.861	63.939	-1.889	3	0	0.00	0	
0	-0.28	-3	-0.763	4+042.61	2.61	0.73	781641.851	3119737.345	1402.231	63.939	-0.763	3	0	0.00	0	rEW=0
0	-0.6	-3	0.616	4+045.81	3.20	1.92	781640.445	3119740.22	1402.685	63.939	0.616	3	0	0.00	0	BC-102
0	-0.9	-3	1.91	4+048.81	3.00	2.70	781639.027	3119742.865	1403.11	59.6418	1.91	3	0	0.00	0	IEW=0.9
0	-0.9	-3	2.423	4+050.00	1.19	1.07	781638.411	3119743.883	1403.279	57.9374	2.423	3	0	0.00	0	
0	-0.9	-3	5.9	4+060.00	10.00	9.00	781632.104	3119751.609	1404.696	43.6143	5.9	3	0	0.00	0	
0	-0.9	-3	5.9	4+064.19	4.19	3.77	781628.924	3119754.336	1405.29	37.611	5.9	3	0	0.00	0	IP-102/X=781631.750,Y=3119758.000,R=40
0	-0.9	-3	5.9	4+070.00	5.81	5.23	781624.081	3119757.535	1406.114	29.2899	5.9	3	0	0.00	0	
0	-0.9	-3	5.915	4+079.57	9.57	8.61	781615.256	3119761.179	1407.47	15.581	5.915	3	0	0.00	0	IEW=0.9
0	-0.857	-3	5.915	4+080.00	0.43	0.37	781614.842	3119761.292	1407.531	14.9663	5.915	3	0	0.00	0	
0	-0.6	-3	5.92	4+082.57	2.57	1.54	781612.342	3119761.875	1407.895	11.291	5.92	3	0	0.00	0	EC-102
0	0	-3	5.929	4+088.57	6.00	0.00	781606.459	3119763.05	1408.746	11.291	5.929	3	0	0.00	0	IEW=0
0	0	-3	5.931	4+090.00	1.43	0.00	781605.056	3119763.33	1408.949	11.291	5.931	3	0	0.00	0	
0	0	-3	5.947	4+100.00	10.00	0.00	781595.25	3119765.287	1410.366	11.291	5.947	3	0	0.00	0	
0	0	-3	5.963	4+110.00	10.00	0.00	781585.443	3119767.245	1411.784	11.291	5.963	3	0	0.00	0	
0	0	-3	5.979	4+120.00	10.00	0.00	781575.637	3119769.203	1413.201	11.291	5.979	3	0	0.00	0	
0	0	-3	5.98	4+120.75	0.75	0.00	781574.905	3119769.35	1413.307	11.291	5.98	3	0	0.00	0	IEW=0
0	-0.533	-3	5.989	4+126.08	5.33	2.84	781569.675	3119770.394	1414.063	11.291	5.989	3	0	0.00	0	BC-103
0	-0.8	-3	5.993	4+128.75	2.67	2.14	781567.05	3119770.845	1414.441	8.2354	5.993	3	0	0.00	0	IEW=0.8
0	-0.8	-3	5.995	4+130.00	1.25	1.00	781565.808	3119771.009	1414.619	6.7998	5.995	3	0	0.00	0	
0	-0.8	-3	6	4+136.68	6.68	5.34	781559.142	3119771.355	1415.565	359.1451	6	3	0	0.00	0	IP-103/X=781559.125,Y=3119772.500,R=50
0	-0.8	-3	6	4+140.00	3.32	2.66	781555.826	3119771.196	1416.036	355.3402	6	3	0	0.00	0	
0	-0.8	-3	5.159	4+144.61	4.61	3.69	781551.252	3119770.61	1416.69	350.0541	5.159	3	0	0.00	0	IEW=0.8
0	-0.533	-3	4.649	4+147.28	2.67	1.42	781548.639	3119770.079	1417.068	346.9972	4.649	3	0	0.00	0	EC-103
0	-0.261	-3	4.129	4+150.00	2.72	0.71	781545.989	3119769.467	1417.454	346.9972	4.129	3	0	0.00	0	
0	0	-3	3.629	4+152.61	2.61	0.00	781543.443	3119768.879	1417.824	346.9972	3.629	3	0	0.00	0	IEW=0
0	0	-3	2.217	4+160.00	7.39	0.00	781536.245	3119767.217	1418.871	346.9972	2.217	3	0	0.00	0	
0	0	-3	0.305	4+170.00	10.00	0.00	781526.502	3119764.967	1420.289	346.9972	0.305	3	0	0.00	0	
0	0	-3	-0.418	4+173.78	3.78	0.00	781522.819	3119764.116	1420.824	346.9972	-0.418	3	0	0.00	0	rEW=0
0	-0.15	-3	-0.705	4+175.28	1.50	0.23	781521.357	3119763.779	1421.037	346.9972	-0.705	3	0	0.00	0	BC-104
0	-0.225	-3	-0.848	4+176.03	0.75	0.17	781520.623	3119763.613	1421.143	347.5339	-0.848	3	0	0.00	0	IEW=0.22
0	-0.225	-3	-1.607	4+180.00	3.97	0.89	781516.726	3119762.853	1421.706	350.3778	-1.607	3	0	0.00	0	
0	-0.225	-3	-3.519	4+190.00	10.00	2.25	781506.788	3119761.801	1423.124	357.5398	-3.519	3	0	0.00	0	
0	-0.225	-3	-4	4+200.00	10.00	2.25	781496.797	3119761.996	1424.541	4.7014	-4	3	0	0.00	0	
0	-0.225	-3	-4	4+201.13	1.13	0.25	781495.671	3119762.097	1424.701	5.5111	-4	3	0	0.00	0	IP-104/X=781495.250,Y=3119757.750,R=80
0	-0.225	-3	-4.003	4+210.00	8.87	2.00	781486.907	3119763.436	1425.959	11.8639	-4.003	3	0	0.00	0	
0	-0.225	-3	-4.13	4+220.00	10.00	2.25	781477.275	3119766.097	1427.308	19.0254	-4.13	3	0	0.00	0	
0	-0.225	-3	-4.208	4+226.23	6.23	1.40	781471.47	3119768.355	1428.04	23.4875	-4.208	3	0	0.00	0	IEW=0.22
0	-0.15	-3	-4.218	4+226.98	0.75	0.11	781470.78	3119768.658	1428.122	24.0262	-4.218	3	0	0.00	0	EC-104
0	0	-3	-4.237	4+228.48	1.50	0.00	781469.41	3119769.269	1428.282	24.0262	-4.237	3	0	0.00	0	rEW=0
0	0	-3	-4.256	4+230.00	1.52	0.00	781468.022	3119769.888	1428.44	24.0262	-4.256	3	0	0.00	0	
0	0	-3	-4.383	4+240.00	10.00	0.00	781458.888	3119773.959	1429.348	24.0262	-4.383	3	0	0.00	0	
0	0	-3	-4.509	4+250.00	10.00	0.00	781449.755	3119778.031	1430.033	24.0262	-4.509	3	0	0.00	0	
0	0	-3	-4.636	4+260.00	10.00	0.00	781440.621	3119782.102	1430.494	24.0262	-4.636	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-4.762	4+270.00	10.00	0.00	781431.487	3119786.174	1430.732	24.0262	-4.762	3	0	0.00	0	
0	0	-3	-4.889	4+280.00	10.00	0.00	781422.354	3119790.245	1430.747	24.0262	-4.889	3	0	0.00	0	
0	0	-3	-4.906	4+281.36	1.36	0.00	781421.115	3119790.798	1430.731	24.0262	-4.906	3	0	0.00	0	IEW=0
0	-0.183	-3	-4.929	4+283.19	1.83	0.33	781419.44	3119791.544	1430.705	24.0262	-4.929	3	0	0.00	0	BC-105
0	-0.275	-3	-4.941	4+284.11	0.92	0.25	781418.605	3119791.925	1430.692	24.901	-4.941	3	0	0.00	0	rEW=0.28
0	-0.275	-3	-5	4+290.00	5.89	1.62	781413.39	3119794.665	1430.605	30.5288	-5	3	0	0.00	0	
0	-0.275	-3	-5	4+291.62	1.62	0.45	781412.006	3119795.506	1430.585	32.0753	-5	3	0	0.00	0	IP-105/X=781411.688,Y=3119795.000,R=60
0	-0.275	-3	-5.113	4+299.13	7.51	2.07	781405.905	3119799.884	1430.582	39.2508	-5.113	3	0	0.00	0	IEW=0.28
0	-0.188	-3	-5.134	4+300.00	0.87	0.16	781405.238	3119800.437	1430.591	40.0782	-5.134	3	0	0.00	0	
0	-0.183	-3	-5.135	4+300.05	0.05	0.01	781405.199	3119800.469	1430.592	40.1249	-5.135	3	0	0.00	0	EC-105
0	0	-3	-5.179	4+301.88	1.83	0.00	781403.798	3119801.65	1430.619	40.1249	-5.179	3	0	0.00	0	rEW=0
0	0	-3	-5.374	4+310.00	8.12	0.00	781397.591	3119806.881	1430.845	40.1249	-5.374	3	0	0.00	0	Required
0	0	-3	-5.615	4+320.00	10.00	0.00	781389.945	3119813.326	1431.368	40.1249	-5.615	3	0	0.00	0	
0	0	-3	-5.728	4+324.72	4.72	0.00	781386.335	3119816.368	1431.707	40.1249	-5.728	3	0	0.00	0	rEW=0
0	0	-3	-5.855	4+330.00	5.28	0.00	781382.298	3119819.77	1432.158	40.1249	-5.855	3	0	0.00	0	
0	0	-3	-5.872	4+330.72	0.72	0.00	781381.748	3119820.234	1432.225	40.1249	-5.872	3	0	0.00	0	BC-106
0	0	-3	-5.944	4+333.72	3.00	0.00	781379.556	3119822.277	1432.521	45.8562	-5.944	3	0	0.00	0	rEW=0.9
0	0	-3	-6	4+338.70	4.98	0.00	781376.4	3119826.121	1433.064	55.366	-6	3	0	0.00	0	IP-106/X=781375.500,Y=3119825.500,R=30
0	0	-3	-6	4+340.00	1.30	0.00	781375.684	3119827.206	1433.217	57.8489	-6	3	0	0.00	0	
0	0	-3	-4.927	4+343.68	3.68	0.00	781373.922	3119830.434	1433.656	64.8768	-5.463	3	0	0.00	0	rEW=0.9
0	0	-3	-3.539	4+346.68	3.00	0.00	781372.786	3119833.21	1434.015	70.6079	-4.769	3	0	0.00	0	EC-106
0	0	-3	-2.002	4+350.00	3.32	0.00	781371.684	3119836.342	1434.411	70.6079	-4.001	3	0	0.00	0	
0	0	-3	-0.762	4+352.68	2.68	0.00	781370.794	3119838.87	1434.731	70.6079	-3.381	3	0	0.00	0	rEW=0
0	0	-3	0	4+358.65	5.97	0.00	781368.812	3119844.5	1435.444	70.6079	0	3	0	0.00	0	IP-107/X=781368.812,Y=3119844.500,R=0
0	0	-3	0	4+360.00	1.35	0.00	781368.812	3119844.5	-1.123	70.6079	0	3	0	0.00	0	
0	0	-3	2.275	4+368.06	8.06	0.00	781364.879	3119853.043	1436.469	65.2814	-1.079	3	0	0.00	0	rEW=0
0	0	-3	2.305	4+370.00	1.94	0.00	781364.066	3119854.81	1436.682	65.2814	-0.976	3	0.194	0.38	0	
0	0	-3	2.428	4+377.80	7.80	0.00	781360.804	3119861.895	1437.537	65.2814	-0.563	3	0.974	7.60	0	BC-108
0	0	-3	2.463	4+380.00	2.20	0.00	781359.994	3119863.942	1437.778	71.585	-0.447	3	1.194	2.63	0	
0	0	-3	2.464	4+380.06	0.06	0.00	781359.977	3119863.994	1437.785	71.7417	-0.444	3	1.2	0.07	0	rEW=1.2
0	0	-3	2.482	4+381.19	1.13	0.00	781359.653	3119865.076	1437.907	74.9778	-0.384	3	1.2	1.36	0	IP-108/X=781359.375,Y=3119865.000,R=20
0	0	-3	2.5	4+382.31	1.12	0.00	781359.392	3119866.175	1438.031	78.2142	-0.324	3	1.2	1.34	0	rEW=1.2
0	0	-3	2.535	4+384.57	2.26	0.00	781359.057	3119868.401	1438.279	84.6656	-0.205	3	0.974	2.20	0	EC-108
0	0	-3	2.621	4+390.00	5.43	0.00	781358.553	3119873.807	1438.862	84.6656	0.082	3	0.431	2.34	0	
0	0	-3	2.689	4+394.31	4.31	0.00	781358.152	3119878.103	1439.208	84.6656	0.311	3	0	0.00	0	rEW=0
0	0	-3	2.779	4+400.00	5.69	0.00	781357.623	3119883.764	1439.453	84.6656	0.612	3	0	0.00	0	
0	0	-3	2.937	4+410.00	10.00	0.00	781356.693	3119893.721	1439.301	84.6656	1.141	3	0	0.00	0	
0	0	-3	3.017	4+415.11	5.11	0.00	781356.218	3119898.808	1438.937	84.6656	1.411	3	0	0.00	0	rEW=0
0	0	-3	3.08	4+419.11	4.00	0.00	781355.846	3119902.791	1438.52	84.6656	1.623	3	0.4	1.60	0	BC-109
0	0	-3	3.095	4+420.00	0.89	0.00	781355.771	3119903.681	1438.419	85.6861	1.67	3	0.489	0.44	0	
0	0	-3	3.112	4+421.11	1.11	0.00	781355.699	3119904.788	1438.293	86.9573	1.729	3	0.6	0.67	0	rEW=0.6
0	0	-3	3.139	4+422.83	1.72	0.00	781355.638	3119906.502	1438.104	88.9228	1.819	3	0.6	1.03	0	IP-109/X=781355.500,Y=3119906.500,R=50
0	0	-3	3.166	4+424.54	1.71	0.00	781355.635	3119908.217	1437.939	90.8881	1.91	3	0.6	1.03	0	rEW=0.6
0	0	-3	3.198	4+426.54	2.00	0.00	781355.706	3119910.216	1437.782	93.1798	2.016	3	0.707	1.41	0	EC-109

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	3.252	4+430.00	3.46	0.00	781355.898	3119913.671	1437.597	93.1798	2.199	3	0.893	3.09	0	
0	0	-3	3.323	4+434.46	4.46	0.00	781356.146	3119918.124	1437.521	93.1798	2.435	3	1.133	5.05	0	BC-110
0	0	-3	3.342	4+435.71	1.25	0.00	781356.254	3119919.369	1437.533	96.7537	2.501	3	1.2	1.50	0	rEW=1.2
0	0	-3	3.352	4+436.33	0.62	0.00	781356.337	3119919.986	1437.544	98.5373	2.534	3	1.2	0.74	0	IP-110/X=781356.250,Y=3119920.000,R=20
0	0	-3	3.362	4+436.95	0.62	0.00	781356.439	3119920.6	1437.559	100.3205	2.567	3	1.2	0.74	0	rEW=1.2
0	0	-3	3.382	4+438.20	1.25	0.00	781356.701	3119921.822	1437.6	103.9	2.633	3	1.075	1.34	0	EC-110
0	0	-3	3.41	4+440.00	1.80	0.00	781357.133	3119923.569	1437.684	103.9	2.728	3	0.895	1.61	0	
0	0	-3	3.511	4+446.38	6.38	0.00	781358.665	3119929.759	1438.127	103.9	3.066	3	0.258	1.65	0	IEW=0
0	-0.258	-3	3.551	4+448.95	2.57	0.66	781359.284	3119932.259	1438.312	103.9	3.202	3	0	0.00	0	rEW=0
0	-0.362	-3	3.568	4+450.00	1.05	0.38	781359.535	3119933.276	1438.387	103.9	3.257	3	0	0.00	0	
0	-0.533	-3	3.595	4+451.71	1.71	0.91	781359.946	3119934.936	1438.51	103.9	3.348	3	0	0.00	0	BC-111
0	-0.8	-3	3.637	4+454.38	2.67	2.14	781360.516	3119937.536	1438.702	100.8443	3.489	3	0	0.00	0	IEW=0.8
0	-0.8	-3	3.7	4+460.00	5.62	4.50	781361.262	3119943.107	1439.105	94.4	3.7	3	0	0.00	0	
0	-0.8	-3	3.7	4+461.69	1.69	1.35	781361.363	3119944.794	1439.227	92.4633	3.7	3	0	0.00	0	IP-111/X=781362.375,Y=3119944.750,R=50
0	-0.8	-3	1.531	4+469.00	7.31	5.85	781361.143	3119952.098	1439.752	84.0823	1.531	3	0	0.00	0	IEW=0.8
0	-0.7	-3	0.989	4+470.00	1.00	0.70	781361.03	3119953.088	1439.824	82.9405	0.989	3	0	0.00	0	
0	-0.666	-3	0.804	4+470.34	0.34	0.23	781360.987	3119953.425	1439.848	82.5512	0.804	3	0	0.00	0	rEW=0
0	-0.533	-3	0.08	4+471.67	1.33	0.71	781360.797	3119954.741	1439.944	81.0274	0.08	3	0.133	0.18	0	EC-111
0	-0.266	-3	-1.372	4+474.34	2.67	0.71	781360.381	3119957.378	1440.135	81.0274	-1.372	3	0.4	1.07	0	BC-112
0	-0.066	-3	-2.46	4+476.34	2.00	0.13	781360.109	3119959.357	1440.279	83.319	-2.46	3	0.6	1.20	0	rEW=0.6
0	0	-3	-2.821	4+477.00	0.66	0.00	781360.036	3119960.017	1440.327	84.0799	-2.821	3	0.6	0.40	0	IEW=0
0	0	-3	-3.7	4+480.00	3.00	0.00	781359.816	3119963.005	1440.542	87.5137	-3.7	3	0.6	1.80	0	
0	0	-3	-3.7	4+480.76	0.76	0.00	781359.789	3119963.764	1440.597	88.384	-3.7	3	0.6	0.46	0	IP-112/X=781359.375,Y=3119963.750,R=50
0	0	-3	-3.722	4+485.18	4.42	0.00	781359.86	3119968.182	1440.914	93.449	-3.722	3	0.6	2.65	0	rEW=0.6
0	0	-3	-3.742	4+487.18	2.00	0.00	781360.02	3119970.171	1441.058	95.7369	-3.742	3	0.4	0.80	0	EC-112
0	0	-3	-3.769	4+490.00	2.82	0.00	781360.302	3119972.977	1441.26	95.7369	-3.769	3	0.118	0.33	0	
0	0	-3	-3.78	4+491.18	1.18	0.00	781360.42	3119974.151	1441.345	95.7369	-3.78	3	0	0.00	0	rEW=0
0	0	-3	-3.796	4+492.76	1.58	0.00	781360.578	3119975.72	1441.459	95.7369	-3.796	3	0	0.00	0	IEW=0
0	-0.724	-3	-3.866	4+500.00	7.24	5.24	781361.302	3119982.926	1441.979	95.7369	-3.866	3	0	0.00	0	
0	-1.578	-3	-3.949	4+508.54	8.54	13.48	781362.155	3119991.424	1442.592	95.7369	-3.949	3	0	0.00	0	BC-113
0	-1.6	-3	-3.951	4+508.76	0.22	0.35	781362.176	3119991.643	1442.608	95.1148	-3.951	3	0	0.00	0	IEW=1.6
0	-1.6	-3	-3.952	4+508.87	0.11	0.18	781362.186	3119991.751	1442.615	94.8041	-3.952	3	0	0.00	0	IP-113/X=781362.188,Y=3119991.750,R=20
0	-1.6	-3	-3.953	4+508.97	0.10	0.16	781362.194	3119991.858	1442.623	94.4967	-3.953	3	0	0.00	0	IEW=1.6
0	-1.578	-3	-3.955	4+509.19	0.22	0.35	781362.21	3119992.074	1442.639	93.8737	-3.955	3	0	0.00	0	EC-113
0	-1.497	-3	-3.963	4+510.00	0.81	1.21	781362.265	3119992.882	1442.697	93.8737	-3.963	3	0	0.00	0	
0	-0.497	-3	-4.06	4+520.00	10.00	4.97	781362.94	3120002.86	1443.415	93.8737	-4.06	3	0	0.00	0	
0	0	-3	-4.109	4+524.97	4.97	0.00	781363.276	3120007.821	1443.772	93.8737	-4.109	3	0	0.00	0	IEW=0
0	0	-3	-4.158	4+530.00	5.03	0.00	781363.616	3120012.837	1444.134	93.8737	-4.158	3	0	0.00	0	
0	0	-3	-4.255	4+540.00	10.00	0.00	781364.291	3120022.814	1444.816	93.8737	-4.255	3	0	0.00	0	
0	0	-3	-4.352	4+550.00	10.00	0.00	781364.967	3120032.791	1445.343	93.8737	-4.352	3	0	0.00	0	
0	0	-3	-4.449	4+560.00	10.00	0.00	781365.643	3120042.768	1445.705	93.8737	-4.449	3	0	0.00	0	
0	0	-3	-4.546	4+570.00	10.00	0.00	781366.318	3120052.745	1445.903	93.8737	-4.546	3	0	0.00	0	
0	0	-3	-4.598	4+575.27	5.27	0.00	781366.674	3120058.003	1445.941	93.8737	-4.598	3	0	0.00	0	IEW=0
0	-0.473	-3	-4.644	4+580.00	4.73	2.24	781366.994	3120062.723	1445.936	93.8737	-4.644	3	0	0.00	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.854	-3	-4.681	4+583.81	3.81	3.25	781367.251	3120066.522	1445.905	93.8737	-4.681	3	0	0.00	0	rEW=0
0	-1.473	-3	-4.741	4+590.00	6.19	9.12	781367.669	3120072.7	1445.841	93.8737	-4.741	3	0.619	3.83	0	
0	-1.622	-3	-4.755	4+591.49	1.49	2.42	781367.77	3120074.186	1445.825	93.8737	-4.755	3	0.768	1.14	0	BC-114
0	-1.9	-3	-4.782	4+594.27	2.78	5.28	781367.661	3120076.964	1445.796	81.6181	-4.782	3	1.046	2.91	0	IEW=1.9
0	-1.9	-3	-4.796	4+595.66	1.39	2.64	781367.386	3120078.325	1445.782	75.4956	-4.796	3	1.185	1.65	0	IP-114/X=781368.062,Y=3120078.500,R=13
0	-1.9	-3	-4.809	4+597.05	1.39	2.64	781366.966	3120079.65	1445.767	69.3666	-4.809	3	1.324	1.84	0	IEW=1.9
0	-1.622	-3	-4.836	4+599.83	2.78	4.51	781365.717	3120082.127	1445.738	57.118	-4.836	3	1.602	4.45	0	EC-114
0	-1.605	-3	-4.838	4+600.00	0.17	0.27	781365.625	3120082.27	1445.736	57.118	-4.838	3	1.619	0.28	0	
0	-1.57	-3	-4.841	4+600.35	0.35	0.55	781365.435	3120082.564	1445.733	57.118	-4.841	3	1.654	0.58	0	BC-115
0	-1.324	-3	-4.865	4+602.81	2.46	3.26	781364.301	3120084.745	1445.707	67.9514	-4.865	3	1.9	4.67	0	rEW=1.9
0	-1.201	-3	-4.877	4+604.04	1.23	1.48	781363.893	3120085.907	1445.694	73.3814	-4.877	3	1.9	2.34	0	IP-115/X=781363.375,Y=3120085.750,R=13
0	-1.078	-3	-4.889	4+605.27	1.23	1.33	781363.597	3120087.102	1445.681	78.8093	-4.889	3	1.9	2.34	0	rEW=1.9
0	-0.832	-3	-4.913	4+607.73	2.46	2.05	781363.35	3120089.54	1445.656	89.6273	-4.913	3	1.9	4.67	0	EC-115
0	-0.605	-3	-4.935	4+610.00	2.27	1.37	781363.336	3120091.81	1445.632	89.6273	-4.935	3	1.9	4.31	0	
0	0	-3	-4.994	4+616.05	6.05	0.00	781363.296	3120097.86	1445.569	89.6273	-4.994	3	1.9	11.50	0	IEW=0
0	0	-3	-5.032	4+620.00	3.95	0.00	781363.271	3120101.81	1445.528	89.6273	-5.032	3	1.9	7.50	0	
0	0	-3	-5.129	4+630.00	10.00	0.00	781363.205	3120111.81	1445.423	89.6273	-5.129	3	1.9	19.00	0	
0	0	-3	-5.15	4+632.12	2.12	0.00	781363.192	3120113.93	1445.401	89.6273	-5.15	3	1.9	4.03	0	BC-116
0	0	-3	-5.154	4+632.50	0.38	0.00	781363.195	3120114.311	1445.397	91.2958	-5.154	3	1.9	0.72	0	rEW=1.9
0	0	-3	-5.156	4+632.69	0.19	0.00	781363.201	3120114.497	1445.395	92.116	-5.156	3	1.9	0.36	0	IP-116/X=781363.188,Y=3120114.500,R=13
0	0	-3	-5.157	4+632.87	0.18	0.00	781363.209	3120114.683	1445.393	92.9366	-5.157	3	1.9	0.34	0	rEW=1.9
0	0	-3	-5.161	4+633.25	0.38	0.00	781363.234	3120115.066	1445.389	94.6308	-5.161	3	1.862	0.71	0	EC-116
0	0	-3	-5.227	4+640.00	6.75	0.00	781363.779	3120121.794	1445.319	94.6308	-5.227	3	1.187	8.01	0	
0	0	-3	-5.229	4+640.22	0.22	0.00	781363.796	3120122.01	1445.317	94.6308	-5.229	3	1.165	0.26	0	IEW=0
0	-0.978	-3	-5.324	4+650.00	9.78	9.56	781364.586	3120131.761	1445.428	94.6308	-5.324	3	0.187	1.83	0	
0	-1.165	-3	-5.342	4+651.87	1.87	2.18	781364.737	3120133.627	1445.496	94.6308	-5.342	3	0	0.00	0	rEW=0
0	-1.791	-3	-5.403	4+658.13	6.26	11.21	781365.243	3120139.865	1445.832	94.6308	-5.403	3	0	0.00	0	BC-117
0	-1.9	-3	-5.413	4+659.22	1.09	2.07	781365.285	3120140.952	1445.908	89.8413	-5.413	3	0	0.00	0	IEW=1.9
0	-1.9	-3	-5.419	4+659.76	0.54	1.03	781365.272	3120141.495	1445.947	87.4473	-5.419	3	0	0.00	0	IP-117/X=781365.375,Y=3120141.500,R=13
0	-1.9	-3	-5.421	4+660.00	0.24	0.46	781365.259	3120141.734	1445.965	86.3923	-5.421	3	0	0.00	0	
0	-1.9	-3	-5.424	4+660.30	0.30	0.57	781365.237	3120142.036	1445.988	85.0577	-5.424	3	0	0.00	0	IEW=1.9
0	-1.791	-3	-5.434	4+661.39	1.09	1.95	781365.098	3120143.116	1446.073	80.2567	-5.434	3	0	0.00	0	EC-117
0	-1.316	-3	-5.481	4+666.14	4.75	6.25	781364.294	3120147.797	1446.507	80.2567	-5.481	3	0	0.00	0	rEW=0
0	-0.93	-3	-5.518	4+670.00	3.86	3.59	781363.64	3120151.602	1446.93	80.2567	-5.518	3	0.386	1.49	0	
0	-0.516	-3	-5.558	4+674.14	4.14	2.14	781362.94	3120155.682	1447.454	80.2567	-5.558	3	0.8	3.31	0	BC-118
0	-0.116	-3	-5.597	4+678.14	4.00	0.46	781362.66	3120159.67	1448.031	91.7163	-5.597	3	1.2	4.80	0	rEW=1.2
0	0	-3	-5.6	4+679.30	1.16	0.00	781362.729	3120160.83	1448.211	95.0458	-5.6	3	1.2	1.39	0	IEW=0
0	0	-3	-5.6	4+680.00	0.70	0.00	781362.802	3120161.524	1448.322	97.0451	-5.6	3	1.2	0.84	0	
0	0	-3	-5.6	4+680.57	0.57	0.00	781362.88	3120162.088	1448.414	98.6762	-5.6	3	1.2	0.68	0	IP-118/X=781361.812,Y=3120162.250,R=20
0	0	-3	-5.442	4+683.00	2.43	0.00	781363.391	3120164.462	1448.804	105.6373	-5.442	3	1.2	2.92	0	rEW=1.2
0	0	-3	-3.226	4+687.00	4.00	0.00	781364.845	3120168.179	1449.447	117.0916	-3.226	3	0.8	3.20	0	EC-118
0	0	-3	-1.565	4+690.00	3.00	0.00	781366.211	3120170.85	1449.929	117.0916	-1.565	3	0.5	1.50	0	
0	0	-3	0.643	4+693.99	3.99	0.00	781368.027	3120174.399	1450.57	117.0916	0.643	3	0.101	0.40	0	IEW=0
0	-0.101	-3	1.204	4+695.00	1.01	0.10	781368.488	3120175.301	1450.733	117.0916	1.204	3	0	0.00	0	rEW=0

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.533	-3	3.597	4+699.32	4.32	2.30	781370.456	3120179.147	1451.427	117.0916	3.597	3	0	0.00	0	BC-119
0	-0.601	-3	3.974	4+700.00	0.68	0.41	781370.763	3120179.759	1451.536	116.3124	3.974	3	0	0.00	0	
0	-0.8	-3	5.074	4+701.99	1.99	1.59	781371.609	3120181.557	1451.856	114.0352	5.074	3	0	0.00	0	IEW=0.8
0	-0.8	-3	5.6	4+704.75	2.76	2.21	781372.662	3120184.105	1452.298	110.8755	5.6	3	0	0.00	0	IP-119/X=781372.938,Y=3120184.000,R=50
0	-0.8	-3	5.516	4+707.50	2.75	2.20	781373.573	3120186.708	1452.741	107.7149	5.516	3	0	0.00	0	IEW=0.8
0	-1.034	-3	5.294	4+710.00	2.50	2.59	781374.273	3120189.105	1453.143	104.8531	5.294	3	0	0.00	0	
0	-1.05	-3	5.278	4+710.17	0.17	0.18	781374.316	3120189.269	1453.17	104.6591	5.278	3	0	0.00	0	EC-119
0	-1.307	-3	5.035	4+712.91	2.74	3.58	781375.01	3120191.92	1453.611	104.6591	5.035	3	0	0.00	0	BC-120
0	-1.9	-3	4.472	4+719.24	6.33	12.03	781375.086	3120198.188	1454.628	76.7484	4.472	3	0	0.00	0	IEW=1.9
0	-1.9	-3	4.404	4+720.00	0.76	1.44	781374.891	3120198.92	1454.75	73.4092	4.404	3	0	0.00	0	
0	-1.9	-3	4.4	4+723.62	3.62	6.88	781373.391	3120202.201	1455.332	57.4578	4.4	3	0	0.00	0	IP-120/X=781378.562,Y=3120205.500,R=13
0	-1.9	-3	4.4	4+724.37	0.75	1.43	781372.97	3120202.821	1455.452	54.1544	4.4	3	0	0.00	0	rEW=0
0	-1.9	-3	3.962	4+728.00	3.63	6.90	781370.465	3120205.429	1456.035	38.1649	3.962	3	0.363	1.32	0	IEW=1.9
0	-1.7	-3	2.872	4+730.00	2.00	3.40	781368.801	3120206.541	1456.331	29.3354	2.872	3	0.563	1.13	0	
0	-1.267	-3	0.517	4+734.33	4.33	5.49	781364.747	3120208	1456.818	10.2568	0.517	3	0.996	4.31	0	EC-120
0	-0.875	-3	-1.616	4+738.25	3.92	3.43	781360.89	3120208.698	1457.076	10.2568	-1.616	3	1.388	5.44	0	BC-121
0	-0.7	-3	-2.567	4+740.00	1.75	1.23	781359.193	3120209.124	1457.136	17.9708	-2.567	3	1.563	2.74	0	
0	-0.363	-3	-4.4	4+743.37	3.37	1.22	781356.158	3120210.565	1457.154	32.8197	-4.4	3	1.9	6.40	0	rEW=1.9
0	-0.107	-3	-4.4	4+745.93	2.56	0.27	781354.156	3120212.155	1457.082	44.1056	-4.4	3	1.9	4.86	0	IP-121/X=781352.312,Y=3120210.250,R=13
0	0	-3	-4.4	4+747.00	1.07	0.00	781353.422	3120212.928	1457.03	48.805	-4.4	3	1.9	2.03	0	IEW=0
0	0	-3	-4.4	4+748.49	1.49	0.00	781352.504	3120214.107	1456.939	55.3943	-4.4	3	1.9	2.83	0	rEW=1.9
0	0	-3	-4.194	4+750.00	1.51	0.00	781351.721	3120215.396	1456.842	62.0452	-4.194	3	1.749	2.64	0	
0	0	-3	-3.702	4+753.61	3.61	0.00	781350.491	3120218.774	1456.623	77.9415	-3.702	3	1.388	5.01	0	EC-121
0	0	-3	-2.831	4+760.00	6.39	0.00	781349.156	3120225.023	1456.409	77.9415	-2.831	3	0.749	4.79	0	
0	0	-3	-1.81	4+767.49	7.49	0.00	781347.591	3120232.349	1456.464	77.9415	-1.81	3	0	0.00	0	rEW=0
0	0	-3	-1.468	4+770.00	2.51	0.00	781347.067	3120234.802	1456.556	77.9415	-1.468	3	0	0.00	0	
0	0	-3	-0.966	4+773.68	3.68	0.00	781346.299	3120238.399	1456.757	77.9415	-0.966	3	0	0.00	0	rEW=0
0	0	-3	-0.104	4+780.00	6.32	0.00	781344.978	3120244.582	1457.289	77.9415	-0.104	3	0.632	3.99	0	
0	0	-3	0.303	4+782.99	2.99	0.00	781344.353	3120247.506	1457.623	77.9415	0.303	3	0.931	2.78	0	BC-122
0	0	-3	0.67	4+785.68	2.69	0.00	781343.971	3120250.162	1457.967	85.6413	0.67	3	1.2	3.23	0	rEW=1.2
0	0	-3	0.853	4+787.02	1.34	0.00	781343.914	3120251.503	1458.155	89.4872	0.853	3	1.2	1.61	0	IP-122/X=781343.500,Y=3120251.500,R=20
0	0	-3	1.036	4+788.36	1.34	0.00	781343.947	3120252.845	1458.353	93.3337	1.036	3	1.2	1.61	0	rEW=1.2
0	0	-3	1.259	4+790.00	1.64	0.00	781344.109	3120254.474	1458.61	98.0248	1.259	3	1.036	1.70	0	
0	0	-3	1.402	4+791.05	1.05	0.00	781344.282	3120255.511	1458.783	101.0392	1.402	3	0.931	0.98	0	EC-122
0	0	-3	2.622	4+800.00	8.95	0.00	781345.996	3120264.295	1460.31	101.0392	2.622	3	0.036	0.32	0	
0	0	-3	2.672	4+800.36	0.36	0.00	781346.066	3120264.651	1460.372	101.0392	2.672	3	0	0.00	0	rEW=0
0	0	-3	2.815	4+801.41	1.05	0.00	781346.267	3120265.683	1460.551	101.0392	2.815	3	0	0.00	0	IEW=0
0	-0.859	-3	3.985	4+810.00	8.59	7.38	781347.911	3120274.11	1462.017	101.0392	3.985	3	0	0.00	0	
0	-1.067	-3	4.269	4+812.08	2.08	2.22	781348.309	3120276.152	1462.356	101.0392	4.269	3	0	0.00	0	BC-123
0	-1.6	-3	4.996	4+817.41	5.33	8.53	781348.624	3120281.459	1463.111	85.7619	4.996	3	0	0.00	0	IEW=1.6
0	-1.6	-3	5	4+820.00	2.59	4.14	781348.267	3120284.019	1463.42	78.3518	5	3	0	0.00	0	
0	-1.6	-3	5	4+820.13	0.13	0.21	781348.241	3120284.142	1463.433	77.9917	5	3	0	0.00	0	IP-123/X=781349.938,Y=3120284.500,R=20
0	-1.6	-3	4.993	4+822.84	2.71	4.34	781347.5	3120286.747	1463.714	70.2269	4.993	3	0	0.00	0	IEW=1.6
0	-1.067	-3	3.639	4+828.17	5.33	5.69	781345.054	3120291.465	1464.142	54.9587	3.639	3	0	0.00	0	EC-123

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-0.884	-3	3.175	4+830.00	1.83	1.62	781344.003	3120292.963	1464.252	54.9587	3.175	3	0	0.00	0	
0	0	-3	0.933	4+838.84	8.84	0.00	781338.929	3120300.198	1464.753	54.9587	0.933	3	0	0.00	0	IEW=0
0	0	-3	0.638	4+840.00	1.16	0.00	781338.261	3120301.15	1464.819	54.9587	0.638	3	0	0.00	0	
0	0	-3	-1.9	4+850.00	10.00	0.00	781332.52	3120309.338	1465.385	54.9587	-1.9	3	0	0.00	0	
0	0	-3	-3.666	4+856.96	6.96	0.00	781328.524	3120315.036	1465.779	54.9587	-3.666	3	0	0.00	0	rEW=0
0	0	-3	-4.437	4+860.00	3.04	0.00	781326.778	3120317.525	1465.951	54.9587	-4.437	3	0.304	0.92	0	
0	0	-3	-4.681	4+860.96	0.96	0.00	781326.227	3120318.311	1466.005	54.9587	-4.681	3	0.4	0.38	0	BC-124
0	0	-3	-5.188	4+862.96	2.00	0.00	781325.114	3120319.968	1466.118	57.2507	-5.188	3	0.6	1.20	0	rEW=0.6
0	0	-3	-5.9	4+868.17	5.21	0.00	781322.528	3120324.489	1466.413	63.2218	-5.9	3	0.6	3.13	0	IP-124/X=781322.062,Y=3120324.250,R=50
0	0	-3	-5.9	4+870.00	1.83	0.00	781321.734	3120326.137	1466.517	65.3181	-5.9	3	0.6	1.10	0	
0	0	-3	-5.9	4+873.38	3.38	0.00	781320.427	3120329.253	1466.711	69.1909	-5.9	3	0.6	2.03	0	rEW=0.6
0	0	-3	-5.9	4+875.38	2.00	0.00	781319.756	3120331.132	1466.834	71.4759	-5.9	3	0.4	0.80	0	EC-124
0	0	-3	-5.9	4+879.38	4.00	0.00	781318.485	3120334.924	1467.098	71.4759	-5.9	3	0	0.00	0	rEW=0
0	0	-3	-5.9	4+880.00	0.62	0.00	781318.288	3120335.512	1467.142	71.4759	-5.9	3	0	0.00	0	
0	0	-3	-5.9	4+883.34	3.34	0.00	781317.227	3120338.679	1467.385	71.4759	-5.9	3	0	0.00	0	rEW=0
0	0	-3	-5.9	4+887.34	4.00	0.00	781315.956	3120342.472	1467.7	71.4759	-5.9	3	0.4	1.60	0	BC-125
0	0	-3	-5.9	4+889.34	2.00	0.00	781315.36	3120344.38	1467.867	73.7684	-5.9	3	0.6	1.20	0	rEW=0.6
0	0	-3	-5.9	4+890.00	0.66	0.00	781315.18	3120345.015	1467.924	74.5248	-5.9	3	0.6	0.40	0	
0	0	-3	-5.9	4+892.89	2.89	0.00	781314.491	3120347.816	1468.176	77.8307	-5.9	3	0.6	1.73	0	IP-125/X=781314.188,Y=3120347.750,R=50
0	0	-3	-5.16	4+896.43	3.54	0.00	781313.867	3120351.305	1468.49	81.8931	-5.16	3	0.6	2.12	0	rEW=0.6
0	0	-3	-4.288	4+898.43	2.00	0.00	781313.624	3120353.289	1468.667	84.1835	-4.288	3	0.4	0.80	0	EC-125
0	0	-3	-3.604	4+900.00	1.57	0.00	781313.465	3120354.851	1468.806	84.1835	-3.604	3	0.243	0.38	0	
0	0	-3	-2.544	4+902.43	2.43	0.00	781313.218	3120357.269	1469.02	84.1835	-2.544	3	0	0.00	0	rEW=0
0	0	-3	-1.384	4+905.09	2.66	0.00	781312.949	3120359.917	1469.255	84.1835	-1.384	3	0	0.00	0	IEW=0
0	-0.491	-3	0.756	4+910.00	4.91	2.41	781312.451	3120364.8	1469.689	84.1835	0.756	3	0	0.00	0	
0	-1.456	-3	4.963	4+919.65	9.65	14.05	781311.473	3120374.4	1470.542	84.1835	4.963	3	0	0.00	0	BC-126
0	-1.491	-3	5.116	4+920.00	0.35	0.52	781311.434	3120374.745	1470.573	82.8461	5.116	3	0	0.00	0	
0	-1.9	-3	6.9	4+924.09	4.09	7.77	781310.381	3120378.686	1470.934	67.2162	6.9	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.9	4+926.32	2.23	4.24	781309.371	3120380.664	1471.132	58.7251	6.9	3	0	0.00	0	IP-126/X=781310.750,Y=3120381.500,R=15
0	-1.9	-3	6.9	4+928.54	2.22	4.22	781308.081	3120382.471	1471.332	50.2365	6.9	3	0	0.00	0	IEW=1.9
0	-1.937	-3	6.811	4+930.00	1.46	2.83	781307.093	3120383.548	1471.464	44.6516	6.811	3	0	0.00	0	
0	-2.012	-3	6.629	4+932.98	2.98	6.00	781304.781	3120385.417	1471.736	33.2749	6.629	3	0	0.00	0	EC-126
0	-2.186	-3	6.205	4+939.92	6.94	15.17	781298.979	3120389.225	1472.38	33.2749	6.205	3	0	0.00	0	BC-127
0	-2.188	-3	6.2	4+940.00	0.08	0.18	781298.913	3120389.268	1472.387	33.1835	6.2	3	0	0.00	0	
0	-2.312	-3	6	4+944.96	4.96	11.47	781294.634	3120391.773	1472.857	27.4993	6	3	0	0.00	0	IP-127/X=781294.750,Y=3120392.000,R=50
0	-2.439	-3	6.309	4+950.00	5.04	12.29	781290.05	3120393.872	1473.342	21.72	6.309	3	0	0.00	0	EC-127
0	-2.469	-3	6.419	4+951.19	1.19	2.94	781288.944	3120394.313	1473.458	21.72	6.419	3	0	0.00	0	BC-128
0	-2.6	-3	6.9	4+956.42	5.23	13.60	781283.817	3120394.918	1473.973	351.784	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	4+959.03	2.61	6.79	781281.311	3120394.214	1474.232	336.827	6.9	3	0	0.00	0	IP-128/X=781279.688,Y=3120398.000,R=10
0	-2.6	-3	6.9	4+960.00	0.97	2.52	781280.435	3120393.788	1474.33	331.2437	6.9	3	0	0.00	0	
0	-2.6	-3	6.9	4+961.63	1.63	4.24	781279.073	3120392.888	1474.494	321.8798	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	4+966.86	5.23	13.60	781275.969	3120388.753	1475.026	291.9101	6.9	3	0	0.00	0	EC-128
0	-2.6	-3	6.9	4+966.87	0.01	0.03	781275.965	3120388.744	1475.027	291.9101	6.9	3	0	0.00	0	BC-129
0	-2.6	-3	6.9	4+969.81	2.94	7.64	781275.28	3120385.89	1475.33	275.0658	6.9	3	0	0.00	0	rEW=0

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-2.6	-3	6.9	4+970.00	0.19	0.49	781275.265	3120385.701	1475.35	273.9795	6.9	3	0.019	0.00	0	
0	-2.6	-3	6.9	4+971.61	1.61	4.19	781275.283	3120384.093	1475.517	264.7558	6.9	3	0.18	0.29	0	IEW=2.6
0	-2.6	-3	6.9	4+973.98	2.37	6.16	781275.776	3120381.78	1475.765	251.1737	6.9	3	0.417	0.99	0	IP-129/X=781272.750,Y=3120380.750,R=10
0	-2.6	-3	6.9	4+976.35	2.37	6.16	781276.798	3120379.648	1476.014	237.5956	6.9	3	0.654	1.55	0	IEW=2.6
0	-2.235	-3	6.828	4+980.00	3.65	8.16	781279.267	3120376.987	1476.402	216.682	6.828	3	1.019	3.72	0	
0	-2.126	-3	6.807	4+981.09	1.09	2.32	781280.174	3120376.387	1476.519	210.4459	6.807	3	1.128	1.23	0	EC-129
0	-1.615	-3	6.706	4+986.20	5.11	8.25	781284.579	3120373.797	1477.071	210.4459	6.706	3	1.639	8.38	0	BC-130
0	-1.354	-3	6.655	4+988.81	2.61	3.53	781286.683	3120372.257	1477.356	221.9505	6.655	3	1.9	4.96	0	rEW=1.9
0	-1.235	-3	6.632	4+990.00	1.19	1.47	781287.53	3120371.423	1477.486	227.1915	6.632	3	1.9	2.26	0	required
0	-1.224	-3	6.629	4+990.12	0.12	0.15	781287.608	3120371.338	1477.5	227.6999	6.629	3	1.9	0.23	0	IP-130/X=781288.062,Y=3120371.750,R=13
0	-1.093	-3	6.604	4+991.42	1.30	1.42	781288.436	3120370.331	1477.642	233.4483	6.604	3	1.9	2.47	0	rEW=1.9
0	-0.832	-3	6.552	4+994.03	2.61	2.17	781289.771	3120368.091	1477.929	244.96	6.552	3	1.9	4.96	0	EC-130
0	-0.516	-3	6.49	4+997.19	3.16	1.63	781291.109	3120365.228	1478.274	244.96	6.49	3	1.9	6.00	0	BC-131
0	-0.301	-3	6.448	4+999.34	2.15	0.65	781291.852	3120363.219	1478.505	254.4318	6.448	3	1.9	4.08	0	rEW=1.9
0	-0.235	-3	6.435	5+000.00	0.66	0.16	781292.013	3120362.578	1478.576	257.345	6.435	3	1.9	1.25	0	
0	-0.194	-3	6.427	5+000.42	0.42	0.08	781292.098	3120362.172	1478.621	259.1732	6.427	3	1.9	0.80	0	IP-131/X=781292.500,Y=3120362.250,R=13
0	-0.086	-3	6.406	5+001.49	1.07	0.09	781292.256	3120361.107	1478.735	263.9197	6.406	3	1.9	2.03	0	rEW=1.9
0	0	-3	6.389	5+002.35	0.86	0.00	781292.319	3120360.251	1478.826	267.7032	6.389	3	1.814	1.56	0	IEW=0
0	0	-3	6.364	5+003.64	1.29	0.00	781292.306	3120358.965	1478.961	273.3733	6.364	3	1.685	2.17	0	EC-131
0	0	-3	6.283	5+007.73	4.09	0.00	781292.065	3120354.877	1479.386	273.3733	6.283	3	1.276	5.22	0	IEW=0
0	-0.227	-3	6.239	5+010.00	2.27	0.52	781291.932	3120352.616	1479.617	273.3733	6.239	3	1.049	2.38	0	
0	-1.227	-3	6.042	5+020.00	10.00	12.27	781291.344	3120342.633	1480.605	273.3733	6.042	3	0.049	0.49	0	
0	-1.276	-3	6.032	5+020.49	0.49	0.63	781291.315	3120342.143	1480.652	273.3733	6.032	3	0	0.00	0	rEW=0
0	-1.868	-3	5.916	5+026.41	5.92	11.06	781290.967	3120336.234	1481.209	273.3733	5.916	3	0	0.00	0	BC-132
0	-1.9	-3	5.91	5+026.73	0.32	0.61	781290.951	3120335.912	1481.239	271.944	5.91	3	0	0.00	0	IEW=1.9
0	-1.9	-3	5.906	5+026.90	0.17	0.32	781290.947	3120335.751	1481.254	271.2342	5.906	3	0	0.00	0	IP-132/X=781290.938,Y=3120335.750,R=13
0	-1.9	-3	5.903	5+027.06	0.16	0.30	781290.945	3120335.591	1481.269	270.5289	5.903	3	0	0.00	0	IEW=1.9
0	-1.868	-3	5.897	5+027.38	0.32	0.60	781290.946	3120335.263	1481.299	269.0793	5.897	3	0	0.00	0	EC-132
0	-1.606	-3	5.845	5+030.00	2.62	4.21	781290.988	3120332.643	1481.538	269.0793	5.845	3	0	0.00	0	
0	-0.606	-3	5.649	5+040.00	10.00	6.06	781291.149	3120322.645	1482.417	269.0793	5.649	3	0	0.00	0	
0	0	-3	5.53	5+046.06	6.06	0.00	781291.246	3120316.59	1482.924	269.0793	5.53	3	0	0.00	0	IEW=0
0	0	-3	5.452	5+050.00	3.94	0.00	781291.309	3120312.646	1483.249	269.0793	5.452	3	0	0.00	0	
0	0	-3	5.326	5+056.42	6.42	0.00	781291.413	3120306.224	1483.78	269.0793	5.326	3	0	0.00	0	rEW=0
0	0	-3	5.256	5+060.00	3.58	0.00	781291.47	3120302.647	1484.076	269.0793	5.256	3	0.358	1.28	0	
0	0	-3	5.137	5+066.05	6.05	0.00	781291.567	3120296.598	1484.577	269.0793	5.137	3	0.963	5.83	0	BC-133
0	0	-3	5.102	5+067.82	1.77	0.00	781291.518	3120294.831	1484.726	274.1432	5.102	3	1.139	2.02	0	IEW=0
0	-0.061	-3	5.09	5+068.42	0.60	0.04	781291.465	3120294.228	1484.777	275.8774	5.09	3	1.2	0.72	0	rEW=1.2
0	-0.179	-3	5.067	5+069.61	1.19	0.21	781291.308	3120293.051	1484.879	279.2796	5.067	3	1.2	1.43	0	IP-133/X=781291.625,Y=3120293.000,R=20
0	-0.218	-3	5.059	5+070.00	0.39	0.09	781291.242	3120292.667	1484.913	280.3958	5.059	3	1.2	0.47	0	
0	-0.298	-3	5.043	5+070.80	0.80	0.24	781291.082	3120291.886	1484.983	282.6798	5.043	3	1.2	0.96	0	rEW=1.2
0	-0.535	-3	4.997	5+073.17	2.37	1.27	781290.426	3120289.609	1485.191	289.4707	4.997	3	0.963	2.28	0	EC-133
0	-1.218	-3	4.863	5+080.00	6.83	8.32	781288.149	3120283.169	1485.815	289.4707	4.863	3	0.28	1.91	0	
0	-1.498	-3	4.808	5+082.80	2.80	4.19	781287.217	3120280.532	1486.08	289.4707	4.808	3	0	0.00	0	rEW=0
0	-1.657	-3	4.776	5+084.39	1.59	2.63	781286.686	3120279.03	1486.233	289.4707	4.776	3	0	0.00	0	BC-134

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.9	-3	4.729	5+086.82	2.43	4.62	781286.094	3120276.675	1486.471	278.7696	4.729	3	0	0.00	0	IEW=1.9
0	-1.9	-3	4.705	5+088.03	1.21	2.30	781285.965	3120275.47	1486.591	273.4265	4.705	3	0	0.00	0	IP-134/X=781285.438,Y=3120275.500,R=13
0	-1.9	-3	4.7	5+088.29	0.26	0.49	781285.952	3120275.209	1486.616	272.2748	4.7	3	0	0.00	0	rEW=0
0	-1.9	-3	4.681	5+089.24	0.95	1.80	781285.949	3120274.258	1486.711	268.0825	4.681	3	0.095	0.09	0	IEW=1.9
0	-1.824	-3	4.666	5+090.00	0.76	1.39	781285.997	3120273.502	1486.788	264.7433	4.666	3	0.171	0.13	0	
0	-1.657	-3	4.633	5+091.67	1.67	2.77	781286.255	3120271.851	1486.957	257.3742	4.633	3	0.338	0.56	0	EC-134
0	-0.824	-3	4.469	5+100.00	8.33	6.86	781288.076	3120263.722	1487.832	257.3742	4.469	3	1.171	9.75	0	
0	-0.167	-3	4.34	5+106.57	6.57	1.10	781289.512	3120257.311	1488.557	257.3742	4.34	3	1.828	12.01	0	BC-135
0	-0.095	-3	4.326	5+107.29	0.72	0.07	781289.651	3120256.601	1488.638	260.5522	4.326	3	1.9	1.37	0	rEW=1.9
0	-0.059	-3	4.319	5+107.65	0.36	0.02	781289.705	3120256.246	1488.679	262.1348	4.319	3	1.9	0.68	0	IP-135/X=781289.750,Y=3120256.250,R=13
0	-0.023	-3	4.312	5+108.01	0.36	0.01	781289.749	3120255.891	1488.72	263.7114	4.312	3	1.9	0.68	0	rEW=1.9
0	0	-3	4.307	5+108.24	0.23	0.00	781289.772	3120255.658	1488.746	264.7433	4.307	3	1.9	0.44	0	IEW=0
0	0	-3	4.298	5+108.73	0.49	0.00	781289.808	3120255.167	1488.802	266.9143	4.298	3	1.9	0.93	0	EC-135
0	0	-3	4.273	5+110.00	1.27	0.00	781289.877	3120253.899	1488.947	266.9143	4.273	3	1.9	2.41	0	
0	0	-3	4.076	5+120.00	10.00	0.00	781290.415	3120243.913	1490.123	266.9143	4.076	3	1.9	19.00	0	
0	0	-3	3.88	5+130.00	10.00	0.00	781290.953	3120233.928	1491.305	266.9143	3.88	3	1.9	19.00	0	
0	0	-3	3.683	5+140.00	10.00	0.00	781291.492	3120223.942	1492.488	266.9143	3.683	3	1.9	19.00	0	
0	0	-3	3.638	5+142.32	2.32	0.00	781291.616	3120221.628	1492.762	266.9143	3.638	3	1.9	4.41	0	IEW=0
0	-0.22	-3	3.594	5+144.52	2.20	0.48	781291.735	3120219.429	1493.022	266.9143	3.594	3	1.9	4.18	0	BC-136
0	-0.315	-3	3.576	5+145.47	0.95	0.30	781291.752	3120218.478	1493.134	271.0931	3.576	3	1.9	1.80	0	rEW=1.9
0	-0.363	-3	3.566	5+145.95	0.48	0.17	781291.734	3120218.002	1493.19	273.1925	3.566	3	1.9	0.91	0	IP-136/X=781291.812,Y=3120218.000,R=13
0	-0.41	-3	3.557	5+146.42	0.47	0.19	781291.699	3120217.527	1493.247	275.2918	3.557	3	1.9	0.89	0	rEW=1.9
0	-0.505	-3	3.538	5+147.37	0.95	0.48	781291.577	3120216.591	1493.359	279.4588	3.538	3	1.805	1.71	0	EC-136
0	-0.768	-3	3.487	5+150.00	2.63	2.02	781291.145	3120213.997	1493.67	279.4588	3.487	3	1.542	4.06	0	
0	-1.768	-3	3.29	5+160.00	10.00	17.68	781289.502	3120204.133	1494.852	279.4588	3.29	3	0.542	5.42	0	
0	-1.784	-3	3.287	5+160.16	0.16	0.29	781289.475	3120203.975	1494.871	279.4588	3.287	3	0.526	0.08	0	BC-137
0	-1.9	-3	3.264	5+161.32	1.16	2.20	781289.336	3120202.824	1495.009	274.3544	3.264	3	0.41	0.48	0	IEW=1.9
0	-1.9	-3	3.253	5+161.90	0.58	1.10	781289.304	3120202.248	1495.077	271.8117	3.253	3	0.353	0.20	0	IP-137/X=781289.188,Y=3120202.250,R=13
0	-1.9	-3	3.241	5+162.47	0.57	1.08	781289.299	3120201.671	1495.145	269.2684	3.241	3	0.295	0.17	0	IEW=1.9
0	-1.9	-3	3.219	5+163.63	1.16	2.20	781289.366	3120200.512	1495.282	264.1518	3.219	3	0.179	0.21	0	EC-137
0	-1.9	-3	3.183	5+165.42	1.79	3.40	781289.549	3120198.73	1495.493	264.1518	3.183	3	0	0.00	0	rEW=0
0	-1.9	-3	3.157	5+166.75	1.33	2.53	781289.684	3120197.405	1495.651	264.1518	3.157	3	0	0.00	0	rEW=0
0	-1.9	-3	3.093	5+170.00	3.25	6.18	781290.015	3120194.175	1496.035	264.1518	3.093	3	0.325	1.06	0	
0	-1.9	-3	3.078	5+170.77	0.77	1.46	781290.094	3120193.409	1496.126	264.1518	3.078	3	0.402	0.31	0	BC-138
0	-1.9	-3	3	5+174.75	3.98	7.56	781291.096	3120189.563	1496.597	246.5861	3	3	0.8	3.18	0	IEW=1.9
0	-1.9	-3	3	5+176.75	2.00	3.80	781292.024	3120187.805	1496.833	237.8161	3	3	0.999	2.00	0	IP-138/X=781290.750,Y=3120187.000,R=13
0	-1.9	-3	3	5+178.73	1.98	3.76	781293.208	3120186.208	1497.067	229.0454	3	3	1.198	2.37	0	IEW=1.9
0	-1.773	-3	2.311	5+180.00	1.27	2.25	781294.082	3120185.294	1497.217	223.4697	2.311	3	1.325	1.68	0	
0	-1.501	-3	0.83	5+182.72	2.72	4.08	781296.241	3120183.64	1497.539	211.4641	0.83	3	1.597	4.34	0	EC-138
0	-1.382	-3	0.182	5+183.91	1.19	1.64	781297.256	3120183.019	1497.68	211.4641	0.182	3	1.716	2.04	0	BC-139
0	-0.798	-3	-3	5+189.75	5.84	4.66	781301.095	3120178.724	1498.37	244.9443	-3	3	2.3	13.43	0	rEW=2.3
0	-0.773	-3	-3	5+190.00	0.25	0.19	781301.197	3120178.499	1498.4	246.3598	-3	3	2.3	0.58	0	
0	-0.506	-3	-3	5+192.68	2.68	1.36	781301.931	3120175.935	1498.715	261.686	-3	3	2.3	6.16	0	IP-139/X=781307.500,Y=3120176.750,R=10
0	-0.214	-3	-3	5+195.60	2.92	0.62	781301.928	3120173.023	1499.062	278.4299	-3	3	2.3	6.72	0	rEW=2.3

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-3.668	5+197.73	2.13	0.00	781301.392	3120170.958	1499.314	290.6768	-3.668	3	2.3	4.90	0	IEW=0
0	0	-3	-4.375	5+200.00	2.27	0.00	781300.36	3120168.947	1499.582	303.6551	-4.375	3	2.3	5.22	0	required
0	0	-3	-4.825	5+201.44	1.44	0.00	781299.48	3120167.811	1499.752	311.9004	-4.825	3	2.3	3.31	0	EC-139
0	0	-3	-5.112	5+202.36	0.92	0.00	781298.865	3120167.126	1499.861	311.9004	-5.112	3	2.3	2.12	0	BC-140
0	0	-3	-6.9	5+208.09	5.73	0.00	781294.059	3120164.157	1500.539	344.7047	-6.9	3	2.3	13.18	0	rEW=2.3
0	0	-3	-6.9	5+210.00	1.91	0.00	781292.175	3120163.832	1500.764	355.6756	-6.9	3	2.3	4.39	0	
0	0	-3	-6.9	5+210.95	0.95	0.00	781291.226	3120163.805	1500.877	1.1173	-6.9	3	2.3	2.18	0	IP-140/X=781291.125,Y=3120158.500,R=10
0	0	-3	-6.9	5+213.81	2.86	0.00	781288.409	3120164.267	1501.215	17.529	-6.9	3	2.3	6.58	0	rEW=2.3
0	0	-3	-5.16	5+219.54	5.73	0.00	781283.725	3120167.418	1501.892	50.3145	-5.16	3	2.202	12.62	0	EC-140
0	0	-3	-5.02	5+220.00	0.46	0.00	781283.431	3120167.772	1501.947	50.3145	-5.02	3	2.194	1.01	0	
0	0	-3	-1.98	5+230.00	10.00	0.00	781277.045	3120175.468	1503.129	50.3145	-1.98	3	2.024	20.24	0	
0	0	-3	-1.003	5+233.22	3.22	0.00	781274.992	3120177.942	1503.51	50.3145	-1.003	3	1.969	6.34	0	IEW=0
0	-0.171	-3	-0.482	5+234.93	1.71	0.29	781273.897	3120179.262	1503.712	50.3145	-0.482	3	1.939	3.32	0	BC-141
0	-0.403	-3	0.221	5+237.24	2.31	0.93	781272.583	3120181.167	1503.985	60.5126	0.221	3	1.9	4.39	0	rEW=1.9
0	-0.518	-3	0.573	5+238.40	1.16	0.60	781272.059	3120182.197	1504.122	65.6075	0.573	3	1.9	2.20	0	IP-141/X=781271.625,Y=3120182.000,R=13
0	-0.634	-3	0.925	5+239.56	1.16	0.74	781271.629	3120183.271	1504.26	70.7079	0.925	3	1.9	2.20	0	rEW=1.9
0	-0.678	-3	1.059	5+240.00	0.44	0.30	781271.49	3120183.692	1504.312	72.662	1.059	3	1.856	0.82	0	
0	-0.865	-3	1.628	5+241.87	1.87	1.62	781271.063	3120185.51	1504.533	80.8989	1.628	3	1.669	3.12	0	EC-141
0	-1.678	-3	4.099	5+250.00	8.13	13.64	781269.777	3120193.537	1505.494	80.8989	4.099	3	0.856	6.96	0	
0	-2.056	-3	5.248	5+253.78	3.78	7.77	781269.179	3120197.27	1505.941	80.8989	5.248	3	0.478	1.81	0	BC-142
0	-2.534	-3	6.7	5+258.56	4.78	12.11	781267.347	3120201.629	1506.507	53.5312	6.7	3	0	0.00	0	rEW=0
0	-2.6	-3	6.9	5+259.22	0.66	1.72	781266.938	3120202.146	1506.586	49.7535	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	5+260.00	0.78	2.03	781266.408	3120202.724	1506.679	45.2593	6.9	3	0	0.00	0	
0	-2.6	-3	6.9	5+261.94	1.94	5.04	781264.922	3120203.958	1506.911	34.1748	6.9	3	0	0.00	0	IP-142/X=781267.500,Y=3120207.750,R=10
0	-2.6	-3	6.9	5+264.65	2.71	7.05	781262.493	3120205.163	1507.236	18.5908	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	5+270.00	5.35	13.91	781257.22	3120205.465	1507.876	347.9653	6.9	3	0	0.00	0	
0	-2.6	-3	6.9	5+270.09	0.09	0.23	781257.136	3120205.447	1507.887	347.4712	6.9	3	0	0.00	0	EC-142
0	-2.6	-3	6.9	5+270.26	0.17	0.44	781256.97	3120205.41	1507.907	347.4712	6.9	3	0	0.00	0	BC-143
0	-2.6	-3	6.9	5+277.53	7.27	18.90	781251.036	3120201.503	1508.777	305.8327	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	5+280.00	2.47	6.42	781249.85	3120199.341	1509.072	291.6673	6.9	3	0	0.00	0	
0	-2.6	-3	6.9	5+280.90	0.90	2.34	781249.554	3120198.487	1509.18	286.4869	6.9	3	0	0.00	0	rEW=0
0	-2.6	-3	6.9	5+281.16	0.26	0.68	781249.485	3120198.241	1509.211	285.0229	6.9	3	0.026	0.01	0	IP-143/X=781238.250,Y=3120201.250,R=10
0	-2.6	-3	6.9	5+284.79	3.63	9.44	781249.194	3120194.64	1509.646	264.209	6.9	3	0.389	1.41	0	IEW=2.6
0	-2.472	-3	5.643	5+290.00	5.21	12.88	781251.015	3120189.824	1510.269	234.3724	5.643	3	0.91	4.74	0	
0	-2.421	-3	5.146	5+292.06	2.06	4.99	781252.382	3120188.282	1510.515	222.541	5.146	3	1.116	2.30	0	EC-143
0	-2.307	-3	4.019	5+296.73	4.67	10.77	781255.823	3120185.124	1511.074	222.541	4.019	3	1.583	7.39	0	BC-144
0	-2.229	-3	3.253	5+299.90	3.17	7.07	781257.881	3120182.712	1511.454	236.5336	3.253	3	1.9	6.02	0	rEW=1.9
0	-2.226	-3	3.23	5+300.00	0.10	0.22	781257.933	3120182.632	1511.465	236.9541	3.23	3	1.9	0.19	0	required
0	-2.19	-3	2.87	5+301.49	1.49	3.26	781258.672	3120181.339	1511.644	243.5217	2.87	3	1.9	2.83	0	IP-144/X=781259.500,Y=3120181.750,R=13
0	-2.151	-3	2.488	5+303.08	1.59	3.42	781259.291	3120179.88	1511.834	250.5113	2.488	3	1.9	3.02	0	rEW=1.9
0	-2.073	-3	1.721	5+306.25	3.17	6.57	781259.977	3120176.787	1512.213	264.5077	1.721	3	1.933	6.13	0	EC-144
0	-1.981	-3	0.816	5+310.00	3.75	7.43	781260.336	3120173.054	1512.662	264.5077	0.816	3	1.971	7.39	0	
0	-1.949	-3	0.5	5+311.31	1.31	2.55	781260.462	3120171.75	1512.819	264.5077	0.5	3	1.985	2.60	0	BC-145
0	-1.9	-3	0.023	5+313.29	1.98	3.76	781260.798	3120169.808	1513.056	255.8002	0.023	3	2.005	3.97	0	IEW=1.9

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.925	-3	-0.215	5+314.28	0.99	1.91	781261.077	3120168.859	1513.174	251.4396	-0.215	3	2.015	1.99	0	IP-145/X=781260.750,Y=3120168.750,R=13
0	-2	-3	-0.931	5+317.24	2.96	5.92	781262.332	3120166.181	1513.528	238.3792	-0.931	3	2.046	6.06	0	EC-145
0	-2.071	-3	-1.597	5+320.00	2.76	5.72	781263.804	3120163.83	1513.859	238.1726	-1.597	3	2.074	5.72	0	
0	-2.25	-3	-3.296	5+327.04	7.04	15.84	781267.47	3120157.836	1514.701	238.3792	-3.296	3	2.146	15.11	0	BC-146
0	-2.3	-3	-3.775	5+329.03	1.99	4.58	781268.644	3120156.243	1514.939	228.8958	-3.775	3	2.167	4.31	0	IEW=2.3
0	-2.3	-3	-4.01	5+330.00	0.97	2.23	781269.184	3120155.412	1515.055	230.0178	-4.01	3	2.177	2.11	0	
0	-2.3	-3	-4.015	5+330.02	0.02	0.05	781269.328	3120155.521	1515.058	224.1458	-4.015	3	2.177	0.04	0	IP-146/X=781269.062,Y=3120155.250,R=12
0	-2.3	-3	-4.255	5+331.01	0.99	2.28	781270.069	3120154.859	1515.176	219.4003	-4.255	3	2.187	2.17	0	IEW=2.3
0	-2.101	-3	-4.734	5+333.00	1.99	4.18	781271.359	3120153.355	1515.414	216.7941	-4.734	3	2.208	4.39	0	EC-146
0	-1.801	-3	-5.458	5+336.00	3.00	5.40	781273.893	3120151.75	1515.773	211.1088	-5.458	3	2.239	6.72	0	BC-147
0	-1.401	-3	-6.424	5+340.00	4.00	5.60	781276.944	3120149.196	1516.252	231.223	-6.424	3	2.28	9.12	0	
0	-1.204	-3	-6.9	5+341.97	1.97	2.37	781278.306	3120147.929	1516.487	244.1575	-6.9	3	2.3	4.53	0	rEW=2.3
0	-0.905	-3	-6.9	5+344.96	2.99	2.71	781279.19	3120145.088	1516.845	261.2686	-6.9	3	2.3	6.88	0	IP-147/X=781285.125,Y=3120146.000,R=10
0	-0.607	-3	-6.9	5+347.95	2.99	1.81	781279.199	3120142.111	1517.203	278.3894	-6.9	3	2.3	6.88	0	rEW=2.3
0	-0.401	-3	-6.9	5+350.00	2.05	0.82	781278.63	3120139.757	1517.448	288.5183	-6.9	3	2.3	4.72	0	
0	-0.009	-3	-6.9	5+353.92	3.92	0.04	781276.667	3120136.802	1517.917	312.5998	-6.9	3	2.3	9.02	0	EC-147
0	0	-3	-6.9	5+354.01	0.09	0.00	781276.603	3120136.732	1517.928	312.5998	-6.9	3	2.3	0.21	0	IEW=0
0	0	-3	-6.9	5+354.89	0.88	0.00	781276.01	3120136.088	1518.033	312.5998	-6.9	3	2.3	2.02	0	BC-148
0	0	-3	-6.9	5+360.00	5.11	0.00	781271.737	3120133.027	1518.645	343.4045	-6.9	3	2.3	11.75	0	required
0	0	-3	-6.9	5+361.65	1.65	0.00	781270.154	3120132.971	1518.842	351.3497	-6.9	3	2.3	3.79	0	rEW=2.3
0	0	-3	-6.9	5+365.04	3.39	0.00	781266.789	3120133.032	1519.248	10.7256	-6.9	3	2.3	7.80	0	IP-148/X=781265.125,Y=3120124.250,R=10
0	0	-3	-6.9	5+368.42	3.38	0.00	781263.634	3120134.206	1519.652	30.1059	-6.9	3	2.3	7.77	0	rEW=2.3
0	0	-3	-6.202	5+370.00	1.58	0.00	781262.36	3120135.029	1519.839	40.7014	-6.202	3	2.205	3.48	0	
0	0	-3	-4.565	5+373.71	3.71	0.00	781259.951	3120137.924	1520.239	60.4434	-4.565	3	1.983	7.36	0	IEW=0
0	-0.147	-3	-3.918	5+375.18	1.47	0.22	781259.323	3120139.249	1520.382	68.8539	-3.918	3	1.895	2.79	0	EC-148
0	-0.629	-3	-1.792	5+380.00	4.82	3.03	781258.195	3120143.9	1520.789	75.1792	-1.792	3	1.607	7.75	0	
0	-1.284	-3	1.096	5+386.55	6.55	8.41	781255.222	3120149.854	1521.19	68.8539	1.096	3	1.214	7.95	0	BC-149
0	-1.38	-3	1.521	5+387.52	0.97	1.34	781254.909	3120150.761	1521.235	73.1053	1.521	3	1.157	1.12	0	IP-149/X=781254.875,Y=3120150.750,R=13
0	-1.477	-3	1.947	5+388.48	0.96	1.42	781254.664	3120151.692	1521.275	77.3518	1.947	3	1.099	1.06	0	EC-149
0	-1.629	-3	2.617	5+390.00	1.52	2.48	781255.575	3120153.548	1521.334	73.6387	2.617	3	1.008	1.53	0	
0	-1.902	-3	3.821	5+392.73	2.73	5.19	781253.733	3120155.839	1521.438	77.3518	3.821	3	0.845	2.31	0	BC-150
0	-2.6	-3	6.9	5+399.71	6.98	18.15	781250.041	3120161.604	1521.705	37.3443	6.9	3	0.427	2.98	0	IEW=2.6
0	-2.6	-3	6.9	5+400.00	0.29	0.75	781251.137	3120162.285	1521.716	38.7484	6.9	3	0.409	0.12	0	
0	-2.6	-3	6.9	5+403.21	3.21	8.35	781246.954	3120163.2	1521.838	17.3315	6.9	3	0.217	0.70	0	IP-150/X=781249.938,Y=3120172.750,R=10
0	-2.6	-3	6.9	5+406.70	3.49	9.07	781243.507	3120163.643	1521.972	357.3176	6.9	3	0.008	0.03	0	IEW=2.6
0	-2.6	-3	6.9	5+406.84	0.14	0.36	781243.368	3120163.636	1521.978	356.5202	6.9	3	0	0.00	0	rEW=0
0	-2.6	-3	6.9	5+410.00	3.16	8.22	781241.697	3120163.966	1522.1	341.4509	6.9	3	0	0.00	0	
0	-2.6	-3	6.9	5+413.68	3.68	9.57	781237.197	3120161.008	1522.281	317.3356	6.9	3	0	0.00	0	EC-150
0	-2.6	-3	6.9	5+416.61	2.93	7.62	781235.043	3120159.022	1522.465	317.3356	6.9	3	0	0.00	0	BC-151
0	-2.6	-3	6.9	5+420.00	3.39	8.81	781233.938	3120157.824	1522.72	307.9941	6.9	3	0	0.00	0	
0	-2.6	-3	6.9	5+423.47	3.47	9.02	781231.917	3120153.062	1523.03	278.0134	6.9	3	0	0.00	0	IEW=2.6
0	-2.6	-3	6.9	5+423.82	0.35	0.91	781231.874	3120152.72	1523.064	276.0384	6.9	3	0	0.00	0	rEW=0
0	-2.6	-3	6.9	5+426.91	3.09	8.03	781232.025	3120149.648	1523.384	258.3462	6.9	3	0.309	0.95	0	IP-151/X=781222.812,Y=3120147.750,R=10
0	-2.6	-3	6.9	5+430.00	3.09	8.03	781232.381	3120148.363	1523.743	250.7008	6.9	3	0.618	1.91	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-2.6	-3	6.9	5+430.34	0.34	0.88	781233.276	3120146.47	1523.784	238.6815	6.9	3	0.652	0.22	0	IEW=2.6
0	-1.914	-3	4.76	5+437.20	6.86	13.13	781238.502	3120142.234	1524.601	199.3685	4.76	3	1.338	9.18	0	EC-151
0	-1.634	-3	3.887	5+440.00	2.80	4.58	781239.484	3120141.889	1524.934	199.3685	3.887	3	1.618	4.53	0	
0	-1.229	-3	2.624	5+444.05	4.05	4.98	781244.965	3120139.962	1525.417	199.3685	2.624	3	2.023	8.19	0	BC-152
0	-0.952	-3	1.761	5+446.82	2.77	2.64	781247.418	3120138.697	1525.747	215.2253	1.761	3	2.3	6.37	0	rEW=2.3
0	-0.814	-3	1.33	5+448.20	1.38	1.12	781248.488	3120137.824	1525.911	223.144	1.33	3	2.3	3.17	0	IP-152/X=781249.125,Y=3120138.500,R=10
0	-0.675	-3	0.899	5+449.58	1.38	0.93	781249.428	3120136.813	1526.076	231.0601	0.899	3	2.3	3.17	0	rEW=2.3
0	-0.634	-3	0.769	5+450.00	0.42	0.27	781248.517	3120137.797	1526.126	223.3711	0.769	3	2.277	0.96	0	required
0	-0.399	-3	0.036	5+452.35	2.35	0.94	781250.851	3120134.444	1526.406	246.9468	0.036	3	2.147	5.05	0	EC-152
0	0	-3	-1.207	5+456.34	3.99	0.00	781252.412	3120130.775	1526.881	246.9468	-1.207	3	1.927	7.69	0	IEW=0
0	0	-3	-2.349	5+460.00	3.66	0.00	781253.158	3120129.024	1527.317	246.9468	-2.349	3	1.725	6.31	0	
0	0	-3	-3.83	5+464.75	4.75	0.00	781255.707	3120123.034	1527.883	246.9468	-3.83	3	1.463	6.95	0	BC-153
0	0	-3	-5	5+470.00	5.25	0.00	781256.631	3120119.674	1528.508	262.3261	-5	3	1.173	6.16	0	
0	0	-3	-5	5+470.38	0.38	0.00	781256.741	3120117.539	1528.554	271.7588	-5	3	1.152	0.44	0	IP-153/X=781258.062,Y=3120117.500,R=13
0	0	-3	-3.811	5+476.01	5.63	0.00	781255.375	3120112.125	1529.213	296.5625	-3.811	3	0.841	4.73	0	EC-153
0	0	-3	-2.547	5+480.00	3.99	0.00	781254.378	3120110.13	1529.617	296.5625	-2.547	3	0.621	2.48	0	
0	0	-3	-0.609	5+486.12	6.12	0.00	781250.854	3120103.082	1530.107	296.5625	-0.609	3	0.284	1.74	0	BC-154
0	0	-3	0.62	5+490.00	3.88	0.00	781249.809	3120101.24	1530.336	302.6349	0.62	3	0.069	0.27	0	
0	0	-3	0.728	5+490.34	0.34	0.00	781248.585	3120099.535	1530.353	308.6504	0.728	3	0.051	0.02	0	IP-154/X=781248.938,Y=3120099.250,R=20
0	0	-3	1.018	5+491.26	0.92	0.00	781247.996	3120098.832	1530.397	311.2781	1.018	3	0	0.00	0	rEW=0
0	0	-3	1.173	5+491.75	0.49	0.00	781247.67	3120098.469	1530.419	312.6759	1.173	3	1.2	0.59	0	rEW=1.2
0	0	-3	1.733	5+493.51	1.76	0.00	781246.416	3120097.224	1530.489	317.7398	1.733	3	1.023	1.80	0	IEW=0
0	-0.105	-3	2.064	5+494.56	1.05	0.11	781245.619	3120096.539	1530.525	320.7546	2.064	3	0.919	0.96	0	EC-154
0	-0.649	-3	3.787	5+500.00	5.44	3.53	781242.769	3120094.21	1530.636	320.7546	3.787	3	0.375	2.04	0	
0	-1.023	-3	4.974	5+503.75	3.75	3.84	781238.505	3120090.728	1530.64	320.7546	4.974	3	0	0.00	0	rEW=0
0	-1.067	-3	5.111	5+504.18	0.43	0.46	781238.169	3120090.453	1530.637	320.7546	5.111	3	0	0.00	0	BC-155
0	-1.6	-3	6.801	5+509.51	5.33	8.53	781234.537	3120086.572	1530.531	305.4757	6.801	3	0	0.00	0	IEW=1.6
0	-1.607	-3	6.9	5+510.00	0.49	0.79	781235.308	3120087.585	1530.516	309.1233	6.9	3	0	0.00	0	
0	-1.643	-3	6.9	5+512.65	2.65	4.35	781232.924	3120083.886	1530.414	296.4907	6.9	3	0	0.00	0	IP-155/X=781231.188,Y=3120084.750,R=20
0	-1.743	-3	5.444	5+520.00	7.35	12.81	781231.157	3120078.601	1529.976	280.4745	5.444	3	0	0.00	0	
0	-1.759	-3	5.084	5+521.12	1.12	1.97	781230.839	3120075.74	1529.89	272.2171	5.084	3	0	0.00	0	EC-155
0	-1.859	-3	2.715	5+528.49	7.37	13.70	781230.554	3120068.376	1529.236	272.2171	2.715	3	0	0.00	0	BC-156
0	-1.88	-3	2.229	5+530.00	1.51	2.84	781230.564	3120068.625	1529.099	272.2171	2.229	3	0	0.00	0	
0	-1.9	-3	1.762	5+531.45	1.45	2.75	781230.776	3120065.425	1528.968	259.1551	1.762	3	0	0.00	0	IEW=1.9
0	-1.9	-3	1.286	5+532.94	1.49	2.83	781231.137	3120063.989	1528.841	252.6257	1.286	3	0	0.00	0	IP-156/X=781230.375,Y=3120063.750,R=13
0	-1.9	-3	0.809	5+534.42	1.48	2.81	781231.659	3120062.604	1528.727	246.0988	0.809	3	0	0.00	0	IEW=1.9
0	-1.604	-3	-0.144	5+537.38	2.96	4.75	781233.158	3120060.053	1528.538	233.0335	-0.144	3	0	0.00	0	EC-156
0	-1.464	-3	-0.594	5+538.78	1.40	2.05	781233.999	3120058.935	1528.466	233.0335	-0.594	3	0	0.00	0	rEW=0
0	-1.342	-3	-0.986	5+540.00	1.22	1.64	781233.675	3120059.366	1528.412	233.0335	-0.986	3	0.122	0.15	0	
0	-0.864	-3	-2.523	5+544.78	4.78	4.13	781237.607	3120054.14	1528.285	233.0335	-2.523	3	0.6	2.87	0	BC-157
0	-0.564	-3	-3.487	5+547.78	3.00	1.69	781239.29	3120051.655	1528.272	238.7637	-3.487	3	0.9	2.70	0	rEW=0.9
0	-0.342	-3	-4.201	5+550.00	2.22	0.76	781239.526	3120051.26	1528.296	239.6425	-4.201	3	0.9	2.00	0	
0	0	-3	-5.3	5+553.42	3.42	0.00	781241.745	3120046.59	1528.375	249.5293	-5.3	3	0.9	3.08	0	IEW=0
0	0	-3	-5.9	5+560.00	6.58	0.00	781243.062	3120041.955	1528.537	258.7418	-5.9	3	0.9	5.92	0	

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-5.9	5+560.54	0.54	0.00	781243.423	3120039.689	1528.55	263.1251	-5.9	3	0.9	0.49	0	IP-157/X=781248.062,Y=3120040.250,R=30
0	0	-3	-5.9	5+570.00	9.46	0.00	781243.359	3120032.006	1528.783	277.8395	-5.9	3	0.9	8.51	0	required
0	0	-3	-5.9	5+573.29	3.29	0.00	781242.253	3120027.084	1528.864	287.4855	-5.9	3	0.9	2.96	0	rEW=0.9
0	0	-3	-5.9	5+576.29	3.00	0.00	781241.21	3120024.275	1528.937	293.2141	-5.9	3	0.6	1.80	0	EC-157
0	0	-3	-5.9	5+580.00	3.71	0.00	781240.442	3120022.483	1528.975	293.2141	-5.9	3	0.229	0.85	0	
0	0	-3	-5.9	5+582.29	2.29	0.00	781238.845	3120018.76	1528.949	293.2141	-5.9	3	0	0.00	0	rEW=0
0	0	-3	-5.9	5+588.54	6.25	0.00	781236.382	3120013.016	1528.69	293.2141	-5.9	3	0	0.00	0	rEW=0
0	0	-3	-5.9	5+590.00	1.46	0.00	781236.5	3120013.292	1528.589	293.2141	-5.9	3	0.146	0.21	0	
0	0	-3	-5.9	5+594.54	4.54	0.00	781234.017	3120007.502	1528.179	293.2141	-5.9	3	0.6	2.72	0	BC-158
0	0	-3	-5.9	5+597.54	3.00	0.00	781232.698	3120004.805	1527.835	298.9444	-5.9	3	0.9	2.70	0	rEW=0.9
0	0	-3	-5.9	5+600.00	2.46	0.00	781232.352	3120004.197	1527.546	300.2805	-5.9	3	0.9	2.21	0	
0	0	-3	-5.9	5+610.00	10.00	0.00	781225.976	3119996.553	1526.369	319.3799	-5.9	3	0.9	9.00	0	
0	0	-3	-5.9	5+613.37	3.37	0.00	781221.821	3119993.564	1525.973	329.1673	-5.9	3	0.9	3.03	0	IP-158/X=781225.438,Y=3119987.500,R=30
0	0	-3	-5.908	5+620.00	6.63	0.00	781217.451	3119991.416	1525.192	338.4773	-5.908	3	0.9	5.97	0	
0	0	-3	-6.115	5+629.19	9.19	0.00	781206.764	3119989.326	1524.111	359.3907	-6.115	3	0.9	8.27	0	rEW=0.9
0	0	-3	-6.133	5+630.00	0.81	0.00	781207.714	3119989.351	1524.015	357.5757	-6.133	3	0.819	0.66	0	
0	0	-3	-6.169	5+631.58	1.58	0.00	781204.371	3119989.396	1523.829	396.42	-6.169	3	0.661	1.04	0	IEW=0
0	-0.061	-3	-6.183	5+632.19	0.61	0.04	781203.764	3119989.444	1523.758	51.249	-6.183	3	0.6	0.37	0	EC-158
0	-0.661	-3	-6.318	5+638.19	6.00	3.97	781197.788	3119989.98	1523.051	51.249	-6.318	3	0	0.00	0	rEW=0
0	-0.842	-3	-6.359	5+640.00	1.81	1.52	781197.738	3119989.984	1522.838	51.249	-6.359	3	0	0.00	0	
0	-1.581	-3	-6.525	5+647.39	7.39	11.68	781188.625	3119990.802	1521.969	51.249	-6.525	3	0	0.00	0	BC-159
0	-1.842	-3	-6.584	5+650.00	2.61	4.81	781187.778	3119990.849	1521.663	1.3797	-6.584	3	0	0.00	0	
0	-1.9	-3	-6.597	5+650.58	0.58	1.10	781185.441	3119990.695	1521.598	351.0434	-6.597	3	0	0.00	0	IEW=1.9
0	-1.9	-3	-6.621	5+651.63	1.05	2.00	781184.416	3119990.49	1521.485	346.4352	-6.621	3	0	0.00	0	rEW=0
0	-1.9	-3	-6.633	5+652.18	0.55	1.05	781183.884	3119990.35	1521.427	344.0104	-6.633	3	0.055	0.03	0	IP-159/X=781183.625,Y=3119991.250,R=13
0	-1.9	-3	-6.669	5+653.78	1.60	3.04	781182.382	3119989.818	1521.269	336.9831	-6.669	3	0.215	0.34	0	IEW=1.9
0	-1.581	-3	-6.741	5+656.97	3.19	5.04	781179.621	3119988.22	1520.992	322.8843	-6.741	3	0.534	1.70	0	EC-159
0	-1.315	-3	-6.801	5+659.63	2.66	3.50	781177.5	3119986.615	1520.8	322.8843	-6.801	3	0.8	2.13	0	BC-160
0	-1.278	-3	-6.81	5+660.00	0.37	0.47	781178.608	3119987.454	1520.776	322.8843	-6.81	3	0.837	0.31	0	
0	-0.915	-3	-6.891	5+663.63	3.63	3.32	781174.093	3119984.537	1520.578	334.3421	-6.891	3	1.2	4.36	0	rEW=1.2
0	-0.657	-3	-6.9	5+666.21	2.58	1.70	781171.707	3119983.574	1520.478	341.7181	-6.9	3	1.2	3.10	0	IP-160/X=781172.062,Y=3119982.500,R=20
0	-0.4	-3	-6.832	5+668.78	2.57	1.03	781169.217	3119982.926	1520.41	349.094	-6.832	3	1.2	3.08	0	rEW=1.2
0	-0.278	-3	-6.617	5+670.00	1.22	0.34	781169.745	3119983.035	1520.388	347.5495	-6.617	3	1.2	1.46	0	
0	0	-3	-6.127	5+672.78	2.78	0.00	781165.244	3119982.566	1520.339	0.5415	-6.127	3	1.2	3.34	0	IEW=0
0	0	-3	-6.126	5+672.78	0.00	0.00	781165.24	3119982.566	1520.339	0.5576	-6.126	3	1.2	0.00	0	EC-160
0	0	-3	-4.851	5+680.00	7.22	0.00	781159.78	3119982.62	1520.211	0.5576	-4.851	3	1.2	8.66	0	
0	0	-3	-4.832	5+680.11	0.11	0.00	781157.91	3119982.638	1520.21	0.5576	-4.832	3	1.2	0.13	0	BC-161
0	0	-3	-4.126	5+684.11	4.00	0.00	781153.946	3119983.075	1520.139	12.0167	-4.126	3	1.2	4.80	0	rEW=1.2
0	0	-3	-3.6	5+688.34	4.23	0.00	781149.93	3119984.386	1520.064	24.1417	-3.6	3	1.2	5.08	0	IEW=0
0	-0.166	-3	-3.6	5+690.00	1.66	0.28	781150.023	3119984.345	1520.035	23.8505	-3.6	3	1.2	1.99	0	
0	-0.223	-3	-3.6	5+690.58	0.58	0.13	781147.948	3119985.411	1520.024	30.5373	-3.6	3	1.2	0.70	0	IP-161/X=781146.375,Y=3119982.750,R=20
0	-0.87	-3	-1.985	5+697.04	6.46	5.62	781143.002	3119989.532	1519.91	49.0609	-1.985	3	1.2	7.75	0	rEW=1.2
0	-1.166	-3	-0.38	5+700.00	2.96	3.45	781142.244	3119990.461	1519.858	52.4964	-0.38	3	0.904	2.68	0	
0	-1.27	-3	0.183	5+701.04	1.04	1.32	781140.697	3119992.797	1519.84	60.5294	0.183	3	0.8	0.83	0	EC-161

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	-1.431	-3	1.056	5+702.65	1.61	2.30	781139.905	3119994.199	1519.811	60.5294	1.056	3	0.639	1.03	0	BC-162
0	-1.9	-3	3.6	5+707.34	4.69	8.91	781136.921	3119997.779	1519.728	39.8541	3.6	3	0.17	0.80	0	IEW=1.9
0	-1.9	-3	3.6	5+709.04	1.70	3.23	781135.549	3119998.779	1519.698	32.3661	3.6	3	0	0.00	0	rEW=0
0	-1.9	-3	3.6	5+709.69	0.65	1.24	781134.992	3119999.114	1519.687	29.5011	3.6	3	0	0.00	0	IP-162/X=781136.062,Y=3120001.000,R=13
0	-1.9	-3	3.6	5+710.00	0.31	0.59	781136.211	3119998.331	1519.681	35.8897	3.6	3	0	0.00	0	
0	-1.9	-3	3.6	5+712.04	2.04	3.88	781132.854	3120000.08	1519.645	19.1472	3.6	3	0	0.00	0	IEW=1.9
0	-1.9	-3	2.856	5+716.73	4.69	8.91	781128.248	3120000.795	1519.562	358.495	2.856	3	0	0.00	0	EC-162
0	-1.9	-3	2.338	5+720.00	3.27	6.21	781126.739	3120000.755	1519.505	358.495	2.338	3	0	0.00	0	
0	-1.9	-3	0.753	5+730.00	10.00	19.00	781116.742	3120000.492	1519.328	358.495	0.753	3	0	0.00	0	
0	-1.9	-3	-0.832	5+740.00	10.00	19.00	781106.746	3120000.23	1519.151	358.495	-0.832	3	0	0.00	0	
0	-1.9	-3	-1.508	5+744.27	4.27	8.11	781100.718	3120000.071	1519.076	358.495	-1.508	3	0	0.00	0	BC-163
0	-1.9	-3	-1.792	5+746.06	1.79	3.40	781098.942	3119999.902	1519.053	350.6101	-1.792	3	0	0.00	0	IEW=1.9
0	-1.9	-3	-1.934	5+746.96	0.90	1.71	781098.064	3119999.725	1519.045	346.6618	-1.934	3	0	0.00	0	IP-163/X=781098.000,Y=3120000.000,R=13
0	-1.9	-3	-2.076	5+747.85	0.89	1.69	781097.201	3119999.489	1519.039	342.7178	-2.076	3	0	0.00	0	IEW=1.9
0	-1.721	-3	-2.359	5+749.64	1.79	3.08	781095.536	3119998.842	1519.036	334.8391	-2.359	3	0	0.00	0	EC-163
0	-1.685	-3	-2.416	5+750.00	0.36	0.61	781096.831	3119999.368	1519.037	341.002	-2.416	3	0	0.00	0	
0	-0.685	-3	-4.001	5+760.00	10.00	6.85	781087.752	3119995.186	1519.218	334.8391	-4.001	3	0	0.00	0	
0	-0.502	-3	-4.291	5+761.83	1.83	0.92	781084.502	3119993.66	1519.286	334.8391	-4.291	3	0	0.00	0	rEW=0
0	0	-3	-5.087	5+766.85	5.02	0.00	781079.958	3119991.525	1519.527	334.8391	-5.087	3	0.502	2.52	0	IEW=0
0	0	-3	-5.559	5+769.83	2.98	0.00	781077.261	3119990.258	1519.708	334.8391	-5.559	3	0.8	2.38	0	BC-164
0	0	-3	-5.586	5+770.00	0.17	0.00	781078.701	3119990.934	1519.719	334.8391	-5.586	3	0.817	0.14	0	
0	0	-3	-6.193	5+773.83	3.83	0.00	781073.494	3119988.929	1519.995	346.2994	-6.193	3	1.2	4.60	0	rEW=1.2
0	0	-3	-6.9	5+780.00	6.17	0.00	781069.13	3119988.363	1520.538	358.9314	-6.9	3	1.2	7.40	0	
0	0	-3	-6.9	5+782.52	2.52	0.00	781064.875	3119988.74	1520.795	11.1919	-6.9	3	1.2	3.02	0	IP-164/X=781063.938,Y=3119984.000,R=20
0	0	-3	-5.276	5+790.00	7.48	0.00	781059.497	3119990.633	1521.676	27.5811	-5.276	3	1.2	8.98	0	
0	0	-3	-4.672	5+791.21	1.21	0.00	781056.976	3119992.198	1521.836	36.0895	-4.672	3	1.2	1.45	0	rEW=1.2
0	0	-3	-2.673	5+795.21	4.00	0.00	781054.002	3119994.859	1522.393	47.5425	-2.673	3	1.085	4.34	0	EC-164
0	0	-3	-1.287	5+797.98	2.77	0.00	781052.13	3119996.906	1522.785	47.5425	-1.287	3	1.005	2.78	0	IEW=0
0	-0.117	-3	-0.704	5+799.15	1.17	0.14	781051.342	3119997.766	1522.951	47.5425	-0.704	3	0.971	1.14	0	BC-165
0	-0.175	-3	-0.412	5+799.73	0.58	0.10	781050.95	3119998.192	1523.033	47.2086	-0.412	3	0.955	0.55	0	IEW=0.17
0	-0.175	-3	-0.279	5+800.00	0.27	0.05	781051.957	3119997.095	1523.072	47.5425	-0.279	3	0.947	0.26	0	
0	-0.175	-3	4	5+810.00	10.00	1.75	781044.913	3120004.182	1524.489	42.3344	4	3	0.659	6.59	0	
0	-0.175	-3	4	5+813.27	3.27	0.57	781041.111	3120007.474	1524.953	39.4526	4	3	0.565	1.85	0	IP-165/X=781041.750,Y=3120008.250,R=100
0	-0.175	-3	3.184	5+820.00	6.73	1.18	781037.196	3120010.536	1525.907	36.6046	3.184	3	0.371	2.50	0	
0	-0.175	-3	0.437	5+826.81	6.81	1.19	781030.109	3120015.343	1526.864	31.6966	0.437	3	0.175	1.19	0	rEW=0.17
0	-0.117	-3	0.202	5+827.39	0.58	0.07	781029.612	3120015.648	1526.943	31.3633	0.202	3	0.117	0.07	0	EC-165
0	0	-3	-0.269	5+828.56	1.17	0.00	781028.616	3120016.255	1527.099	31.3633	-0.269	3	0	0.00	0	rEW=0
0	0	-3	-0.529	5+829.20	0.64	0.00	781028.067	3120016.59	1527.184	31.3633	-0.529	3	0	0.00	0	rEW=0
0	0	-3	-0.851	5+830.00	0.80	0.00	781028.887	3120016.091	1527.289	31.3633	-0.851	3	0.08	0.06	0	
0	0	-3	-3.757	5+837.20	7.20	0.00	781021.236	3120020.754	1528.179	31.3633	-3.757	3	0.8	5.76	0	BC-166
0	0	-3	-4.886	5+840.00	2.80	0.00	781020.362	3120021.318	1528.5	34.3424	-4.886	3	1.08	3.02	0	
0	0	-3	-5.371	5+841.20	1.20	0.00	781018.051	3120023.163	1528.632	42.8218	-5.371	3	1.2	1.44	0	rEW=1.2
0	0	-3	-5.5	5+843.68	2.48	0.00	781016.341	3120024.956	1528.898	49.9245	-5.5	3	1.2	2.98	0	IP-166/X=781015.500,Y=3120024.250,R=20
0	0	-3	-5.323	5+846.16	2.48	0.00	781014.866	3120026.948	1529.153	57.0298	-5.323	3	1.2	2.98	0	rEW=1.2

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-4.959	5+846.82	0.66	0.00	781014.514	3120027.51	1529.219	58.9296	-4.959	3	1.134	0.75	0	IEW=0
0	-0.318	-3	-3.21	5+850.00	3.18	1.01	781013.827	3120028.749	1529.524	62.9891	-3.21	3	0.816	2.59	0	
0	-0.334	-3	-3.122	5+850.16	0.16	0.05	781013.038	3120030.5	1529.539	68.4986	-3.122	3	0.8	0.13	0	EC-166
0	-1.134	-3	1.282	5+858.16	8.00	9.07	781010.106	3120037.944	1530.223	68.4986	1.282	3	0	0.00	0	rEW=0
0	-1.318	-3	2.295	5+860.00	1.84	2.43	781010.076	3120038.018	1530.364	68.4986	2.295	3	0	0.00	0	
0	-1.339	-3	2.411	5+860.21	0.21	0.28	781009.354	3120039.851	1530.379	68.4986	2.411	3	0	0.00	0	BC-167
0	-1.9	-3	5.5	5+865.82	5.61	10.66	781006.251	3120044.475	1530.767	43.7627	5.5	3	0	0.00	0	IEW=1.9
0	-1.9	-3	5.5	5+868.63	2.81	5.34	781004.03	3120046.184	1530.939	31.3878	5.5	3	0	0.00	0	IP-167/X=781005.750,Y=3120049.000,R=13
0	-1.9	-3	5.5	5+870.00	1.37	2.60	781004.359	3120045.976	1531.017	33.1033	5.5	3	0	0.00	0	
0	-1.9	-3	5.5	5+871.44	1.44	2.74	781001.494	3120047.377	1531.096	19.012	5.5	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.2	5+877.05	5.61	10.66	780995.965	3120048.022	1531.376	354.2894	6.2	3	0	0.00	0	EC-167
0	-1.9	-3	6.237	5+877.35	0.30	0.57	780995.667	3120047.992	1531.391	354.2894	6.237	3	0	0.00	0	BC-168
0	-1.9	-3	6.568	5+880.00	2.65	5.03	780994.789	3120047.874	1531.521	350.3645	6.568	3	0	0.00	0	required
0	-1.9	-3	6.8	5+881.86	1.86	3.53	780991.346	3120046.78	1531.612	334.3909	6.8	3	0	0.00	0	IEW=1.9
0	-1.9	-3	6.8	5+884.12	2.26	4.29	780989.406	3120045.634	1531.723	324.448	6.8	3	0	0.00	0	IP-168/X=780988.250,Y=3120047.250,R=13
0	-1.9	-3	6.8	5+886.38	2.26	4.29	780987.693	3120044.17	1531.833	314.5045	6.8	3	0	0.00	0	IEW=1.9
0	-1.753	-3	4.937	5+890.00	3.62	6.35	780986.487	3120042.752	1532.011	306.2934	4.937	3	0	0.00	0	
0	-1.717	-3	4.479	5+890.89	0.89	1.53	780985.145	3120040.469	1532.054	294.6051	4.479	3	0	0.00	0	EC-168
0	-1.537	-3	2.191	5+895.34	4.45	6.84	780983.292	3120036.423	1532.272	294.6051	2.191	3	0	0.00	0	rEW=0
0	-1.476	-3	1.419	5+896.84	1.50	2.21	780982.667	3120035.059	1532.346	294.6051	1.419	3	0.15	0.23	0	BC-169
0	-1.446	-3	1.034	5+897.59	0.75	1.08	780982.354	3120034.383	1532.382	295.1418	1.034	3	0.225	0.17	0	rEW=0.22
0	-1.348	-3	-0.206	5+900.00	2.41	3.25	780982.075	3120033.795	1532.5	295.608	-0.206	3	0.225	0.54	0	
0	-0.943	-3	-4	5+910.00	10.00	9.43	780977.201	3120025.071	1532.99	302.7697	-4	3	0.225	2.25	0	
0	-0.835	-3	-4	5+912.65	2.65	2.21	780974.713	3120021.43	1533.12	305.9285	-4	3	0.225	0.60	0	IP-169/X=780976.000,Y=3120020.500,R=80
0	-0.537	-3	-3.594	5+920.00	7.35	3.95	780971.278	3120017.022	1533.578	309.9317	-3.594	3	0.225	1.65	0	
0	-0.225	-3	-2.087	5+927.71	7.71	1.73	780964.784	3120010.137	1534.265	316.714	-2.087	3	0.225	1.73	0	IEW=0.22
0	-0.15	-3	-1.94	5+928.46	0.75	0.11	780964.238	3120009.628	1534.343	317.2506	-1.94	3	0.15	0.11	0	EC-169
0	0	-3	-1.647	5+929.96	1.50	0.00	780963.137	3120008.61	1534.504	317.2506	-1.647	3	0	0.00	0	rEW=0
0	0	-3	-1.639	5+930.00	0.04	0.00	780964.397	3120009.775	1534.509	317.0935	-1.639	3	0	0.00	0	
0	0	-3	0.316	5+940.00	10.00	0.00	780957.056	3120002.989	1535.695	317.2506	0.316	3	0	0.00	0	
0	0	-3	2.27	5+950.00	10.00	0.00	780949.713	3119996.201	1536.914	317.2506	2.27	3	0	0.00	0	
0	0	-3	3.427	5+955.92	5.92	0.00	780944.076	3119990.99	1537.655	317.2506	3.427	3	0	0.00	0	IEW=0
0	-0.408	-3	4.225	5+960.00	4.08	1.66	780942.37	3119989.413	1538.174	317.2506	4.225	3	0	0.00	0	
0	-0.533	-3	4.469	5+961.25	1.25	0.67	780940.16	3119987.37	1538.335	317.2506	4.469	3	0	0.00	0	BC-170
0	-0.8	-3	4.991	5+963.92	2.67	2.14	780938.253	3119985.511	1538.679	314.1946	4.991	3	0	0.00	0	IEW=0.8
0	-0.8	-3	6	5+970.00	6.08	4.86	780935.377	3119982.284	1539.475	309.2397	6	3	0	0.00	0	
0	-0.8	-3	6	5+973.00	3.00	2.40	780932.548	3119978.464	1539.874	303.7905	6	3	0	0.00	0	IP-170/X=780931.375,Y=3119979.250,R=50
0	-0.8	-3	4.592	5+980.00	7.00	5.60	780929.865	3119973.961	1540.817	297.7812	4.592	3	0	0.00	0	
0	-0.8	-3	3.648	5+982.07	2.07	1.66	780928.21	3119970.504	1541.1	293.3882	3.648	3	0	0.00	0	IEW=0.8
0	-0.533	-3	2.433	5+984.74	2.67	1.42	780927.217	3119968.03	1541.468	290.3338	2.433	3	0	0.00	0	EC-170
0	-0.038	-3	0.177	5+989.69	4.95	0.19	780925.497	3119963.388	1542.157	290.3338	0.177	3	0	0.00	0	rEW=0
0	-0.007	-3	0.036	5+990.00	0.31	0.00	780926.001	3119964.748	1542.2	290.3338	0.036	3	0.031	0.01	0	
0	0	-3	0.003	5+990.07	0.07	0.00	780925.364	3119963.029	1542.21	290.3338	0.003	3	0.038	0.00	0	IEW=0
0	0	-3	-3.468	5+997.69	7.62	0.00	780922.717	3119955.887	1543.292	290.3338	-3.468	3	0.8	6.10	0	BC-171

LAYOUT DATA																
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-4.52	6+000.00	2.31	0.00	780922.519	3119955.376	1543.624	291.9105	-4.52	3	1.031	2.38	0	
0	0	-3	-5.29	6+001.69	1.69	0.00	780920.963	3119952.302	1543.869	301.7931	-5.29	3	1.2	2.03	0	rEW=1.2
0	0	-3	-6.9	6+008.99	7.30	0.00	780916.082	3119946.928	1544.939	322.7067	-6.9	3	1.2	8.76	0	IP-171/X=780918.312,Y=3119944.000,R=20
0	0	-3	-6.9	6+010.00	1.01	0.00	780916.67	3119947.394	1545.089	320.5572	-6.9	3	1.2	1.21	0	
0	0	-3	-5.191	6+016.29	6.29	0.00	780909.604	3119943.651	1546.031	343.6202	-5.191	3	1.2	7.55	0	rEW=1.2
0	0	-3	-4.047	6+018.65	2.36	0.00	780907.303	3119943.12	1546.389	350.3893	-4.047	3	0.964	2.28	0	IEW=0
0	-0.135	-3	-3.396	6+020.00	1.35	0.18	780907.71	3119943.193	1546.595	349.2047	-3.396	3	0.829	1.12	0	
0	-0.164	-3	-3.256	6+020.29	0.29	0.05	780905.68	3119942.912	1546.639	355.0794	-3.256	3	0.8	0.23	0	EC-171
0	-0.964	-3	0.614	6+028.29	8.00	7.71	780897.709	3119942.226	1547.874	355.0794	0.614	3	0	0.00	0	rEW=0
0	-1.067	-3	1.112	6+029.32	1.03	1.10	780896.683	3119942.138	1548.035	355.0794	1.112	3	0	0.00	0	BC-172
0	-1.135	-3	1.441	6+030.00	0.68	0.77	780897.759	3119942.231	1548.141	355.0794	1.441	3	0	0.00	0	
0	-1.6	-3	3.692	6+034.65	4.65	7.44	780891.496	3119940.982	1548.865	339.8	3.692	3	0	0.00	0	IEW=1.6
0	-1.6	-3	5.5	6+040.00	5.35	8.56	780888.258	3119939.449	1549.699	329.5231	5.5	3	0	0.00	0	
0	-1.6	-3	5.5	6+042.93	2.93	4.69	780884.535	3119936.624	1550.154	316.1041	5.5	3	0	0.00	0	IP-172/X=780880.562,Y=3119940.750,R=20
0	-1.6	-3	5.5	6+044.49	1.56	2.50	780883.451	3119935.496	1550.399	311.6212	5.5	3	0	0.00	0	rEW=0
0	-1.6	-3	4.105	6+050.00	5.51	8.82	780881.236	3119932.476	1551.257	300.8763	4.105	3	0.551	3.04	0	
0	-1.6	-3	3.448	6+051.20	1.20	1.92	780879.912	3119929.835	1551.444	292.4052	3.448	3	0.671	0.81	0	IEW=1.6
0	-1.067	-3	0.519	6+056.53	5.33	5.69	780878.555	3119924.692	1552.275	277.1241	0.519	3	1.204	6.42	0	EC-172
0	-0.72	-3	-1.387	6+060.00	3.47	2.50	780878.343	3119922.995	1552.816	277.1241	-1.387	3	1.551	5.38	0	
0	-0.349	-3	-3.424	6+063.71	3.71	1.29	780877.665	3119917.567	1553.394	277.1241	-3.424	3	1.922	7.13	0	BC-173
0	0	-3	-5.339	6+067.20	3.49	0.00	780876.644	3119914.251	1553.937	297.1031	-5.339	3	2.271	7.93	0	IEW=0
0	0	-3	-5.5	6+067.49	0.29	0.00	780876.507	3119913.993	1553.983	298.7769	-5.5	3	2.3	0.67	0	rEW=2.3
0	0	-3	-5.5	6+069.38	1.89	0.00	780875.446	3119912.431	1554.277	309.6119	-5.5	3	2.3	4.35	0	IP-173/X=780876.875,Y=3119911.250,R=10
0	0	-3	-5.5	6+070.00	0.62	0.00	780876.121	3119913.349	1554.374	303.0798	-5.5	3	2.3	1.43	0	
0	0	-3	-5.5	6+071.27	1.27	0.00	780874.111	3119911.097	1554.572	320.4409	-5.5	3	2.3	2.92	0	rEW=2.3
0	0	-3	-6.018	6+075.05	3.78	0.00	780870.818	3119909.292	1555.161	342.0879	-6.018	3	2.3	8.69	0	EC-173
0	0	-3	-6.074	6+075.46	0.41	0.00	780870.427	3119909.166	1555.225	342.0879	-6.074	3	2.3	0.94	0	BC-174
0	0	-3	-6.695	6+080.00	4.54	0.00	780867.7	3119908.688	1555.932	358.0114	-6.695	3	2.3	10.44	0	required
0	0	-3	-6.9	6+081.49	1.49	0.00	780864.486	3119909.102	1556.164	16.6608	-6.9	3	2.3	3.43	0	rEW=2.3
0	0	-3	-6.9	6+084.51	3.02	0.00	780861.77	3119910.386	1556.635	33.9396	-6.9	3	2.3	6.95	0	IP-174/X=780858.312,Y=3119905.250,R=10
0	0	-3	-6.9	6+087.53	3.02	0.00	780859.557	3119912.419	1557.105	51.223	-6.9	3	2.3	6.95	0	rEW=2.3
0	0	-3	-6.708	6+090.00	2.47	0.00	780859.131	3119912.991	1557.49	55.3103	-6.708	3	2.053	5.07	0	
0	0	-3	-6.431	6+093.56	3.56	0.00	780857.38	3119917.95	1558.045	85.8023	-6.431	3	1.697	6.04	0	EC-174
0	0	-3	-6.078	6+098.10	4.54	0.00	780857.048	3119922.475	1558.753	85.8023	-6.078	3	1.243	5.64	0	IEW=0
0	-0.19	-3	-5.93	6+100.00	1.90	0.36	780857.037	3119922.618	1559.047	85.8023	-5.93	3	1.053	2.00	0	
0	-0.533	-3	-5.664	6+103.43	3.43	1.83	780856.657	3119927.794	1559.555	85.8023	-5.664	3	0.71	2.44	0	BC-175
0	-0.8	-3	-5.456	6+106.10	2.67	2.14	780856.391	3119930.452	1559.927	82.7465	-5.456	3	0.443	1.18	0	IEW=0.8
0	-0.8	-3	-5.298	6+108.13	2.03	1.62	780856.093	3119932.463	1560.195	80.4167	-5.298	3	0.24	0.49	0	IP-175/X=780856.312,Y=3119932.500,R=50
0	-0.8	-3	-5.153	6+110.00	1.87	1.50	780856.075	3119932.572	1560.433	80.2901	-5.153	3	0.053	0.10	0	
0	-0.8	-3	-5.14	6+110.16	0.16	0.13	780855.714	3119934.461	1560.452	78.0862	-5.14	3	0.036	0.01	0	IEW=0.8
0	-0.764	-3	-5.112	6+110.53	0.37	0.28	780855.638	3119934.815	1560.498	77.6713	-5.112	3	0	0.00	0	rEW=0
0	-0.533	-3	-4.933	6+112.83	2.30	1.23	780855.095	3119937.054	1560.772	75.0329	-4.933	3	0	0.00	0	EC-175
0	-0.533	-3	-4.933	6+112.83	0.00	0.00	780855.094	3119937.057	1560.772	75.0329	-4.933	3	0	0.00	0	rEW=0
0	0	-3	-4.518	6+118.16	5.33	0.00	780853.717	3119942.207	1561.349	75.0329	-4.518	3	0.533	2.84	0	IEW=0

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-4.516	6+118.20	0.04	0.00	780853.708	3119942.241	1561.353	75.0329	-4.516	3	0.537	0.02	0	IEW=0
0	-0.18	-3	-4.376	6+120.00	1.80	0.32	780853.697	3119942.28	1561.529	75.0329	-4.376	3	0.717	1.29	0	
0	-0.306	-3	-4.278	6+121.26	1.26	0.39	780852.917	3119945.198	1561.647	75.0329	-4.278	3	0.843	1.06	0	BC-176
0	-0.663	-3	-4	6+124.83	3.57	2.37	780852.307	3119948.71	1561.956	85.2706	-4	3	1.2	4.28	0	rEW=1.2
0	-0.842	-3	-4	6+126.62	1.79	1.51	780852.239	3119950.495	1562.097	90.3896	-4	3	1.2	2.15	0	IP-176/X=780851.500,Y=3119950.500,R=20
0	-1.021	-3	-4	6+128.41	1.79	1.83	780852.331	3119952.278	1562.229	95.5059	-4	3	1.2	2.15	0	rEW=1.2
0	-1.18	-3	-3.987	6+130.00	1.59	1.88	780852.316	3119952.112	1562.338	95.0284	-3.987	3	1.041	1.66	0	
0	-1.378	-3	-3.971	6+131.98	1.98	2.73	780852.99	3119955.786	1562.464	105.7417	-3.971	3	0.843	1.67	0	EC-176
0	-1.628	-3	-3.951	6+134.48	2.50	4.07	780853.668	3119958.192	1562.606	105.7417	-3.951	3	0.593	1.48	0	BC-177
0	-1.9	-3	-3.929	6+137.20	2.72	5.17	780854.128	3119960.865	1562.741	93.7622	-3.929	3	0.321	0.87	0	IEW=1.9
0	-1.9	-3	-3.918	6+138.56	1.36	2.58	780854.146	3119962.226	1562.8	87.7605	-3.918	3	0.185	0.25	0	IP-177/X=780854.812,Y=3119962.250,R=13
0	-1.9	-3	-3.907	6+139.92	1.36	2.58	780854.022	3119963.581	1562.855	81.7608	-3.907	3	0.049	0.07	0	IEW=1.9
0	-1.894	-3	-3.906	6+140.00	0.08	0.15	780854.155	3119961.906	1562.858	89.1714	-3.906	3	0.041	0.00	0	
0	-1.863	-3	-3.903	6+140.41	0.41	0.76	780853.943	3119964.06	1562.873	79.621	-3.903	3	0	0.00	0	rEW=0
0	-1.694	-3	-3.885	6+142.64	2.23	3.78	780853.356	3119966.208	1562.947	69.7964	-3.885	3	0	0.00	0	EC-177
0	-1.527	-3	-3.867	6+144.85	2.21	3.37	780852.592	3119968.282	1563.006	69.7964	-3.867	3	0	0.00	0	BC-178
0	-1.29	-3	-3.842	6+147.99	3.14	4.05	780851.284	3119971.128	1563.065	60.8013	-3.842	3	0	0.00	0	IP-178/X=780851.500,Y=3119971.250,R=20
0	-1.138	-3	-3.826	6+150.00	2.01	2.29	780851.16	3119971.345	1563.09	60.0853	-3.826	3	0	0.00	0	
0	-1.052	-3	-3.816	6+151.13	1.13	1.19	780849.542	3119973.739	1563.103	51.8013	-3.816	3	0	0.00	0	EC-178
0	-0.683	-3	-3.777	6+156.01	4.88	3.33	780846.524	3119977.574	1563.16	51.8013	-3.777	3	0	0.00	0	rEW=0
0	-0.381	-3	-3.745	6+160.00	3.99	1.52	780845.145	3119979.326	1563.206	51.8013	-3.745	3	0.399	1.59	0	
0	-0.229	-3	-3.729	6+162.01	2.01	0.46	780842.813	3119982.289	1563.229	51.8013	-3.729	3	0.6	1.21	0	BC-179
0	-0.002	-3	-3.704	6+165.01	3.00	0.01	780841.079	3119984.736	1563.263	57.5294	-3.704	3	0.9	2.70	0	rEW=0.9
0	0	-3	-3.704	6+165.04	0.03	0.00	780841.065	3119984.758	1563.264	57.5792	-3.704	3	0.9	0.03	0	IEW=0
0	0	-3	-3.7	6+167.31	2.27	0.00	780839.92	3119986.722	1563.29	61.9221	-3.7	3	0.9	2.04	0	IP-179/X=780839.500,Y=3119986.500,R=30
0	0	-3	-3.7	6+168.56	1.25	0.00	780839.354	3119987.837	1563.304	64.3104	-3.7	3	0.9	1.13	0	IEW=0
0	-0.105	-3	-3.408	6+169.61	1.05	0.11	780838.916	3119988.791	1563.317	66.3154	-3.408	3	0.9	0.94	0	rEW=0.9
0	-0.144	-3	-3.194	6+170.00	0.39	0.06	780839.495	3119987.549	1563.321	63.698	-3.194	3	0.861	0.34	0	
0	-0.405	-3	-1.767	6+172.61	2.61	1.06	780837.849	3119991.596	1563.351	72.0506	-1.767	3	0.6	1.57	0	EC-179
0	-0.8	-3	0.394	6+176.56	3.95	3.16	780836.632	3119995.354	1563.397	72.0506	0.394	3	0.205	0.81	0	BC-180
0	-1.005	-3	1.515	6+178.61	2.05	2.06	780835.934	3119997.28	1563.42	68.1362	1.515	3	0	0.00	0	rEW=0
0	-1.144	-3	2.276	6+180.00	1.39	1.59	780836.07	3119996.936	1563.437	68.8426	2.276	3	0	0.00	0	
0	-1.2	-3	2.582	6+180.56	0.56	0.67	780835.15	3119999.065	1563.443	64.4121	2.582	3	0	0.00	0	IEW=1.2
0	-1.2	-3	3.7	6+185.63	5.07	6.08	780832.588	3120003.427	1563.501	54.7392	3.7	3	0	0.00	0	IP-180/X=780833.750,Y=3120004.250,R=30
0	-1.2	-3	3.164	6+190.00	4.37	5.24	780830.987	3120005.494	1563.552	49.7442	3.164	3	0	0.00	0	
0	-1.2	-3	2.891	6+190.69	0.69	0.83	780829.329	3120007.297	1563.56	45.0648	2.891	3	0	0.00	0	IEW=1.2
0	-0.8	-3	1.308	6+194.69	4.00	3.20	780826.322	3120009.933	1563.606	37.4213	1.308	3	0	0.00	0	EC-180
0	-0.269	-3	-0.794	6+200.00	5.31	1.43	780823.503	3120012.09	1563.667	37.4213	-0.794	3	0	0.00	0	
0	0	-3	-1.859	6+202.69	2.69	0.00	780819.969	3120014.795	1563.699	37.4213	-1.859	3	0	0.00	0	IEW=0
0	0	-3	-2.013	6+203.08	0.39	0.00	780819.659	3120015.032	1563.703	37.4213	-2.013	3	0	0.00	0	rEW=0
0	0	-3	-4.752	6+210.00	6.92	0.00	780815.561	3120018.167	1563.783	37.4213	-4.752	3	0.692	4.79	0	
0	0	-3	-5.18	6+211.08	1.08	0.00	780813.306	3120019.893	1563.795	37.4213	-5.18	3	0.8	0.86	0	BC-181
0	0	-3	-6.763	6+215.08	4.00	0.00	780810.394	3120022.622	1563.842	48.8801	-6.763	3	1.2	4.80	0	rEW=1.2
0	0	-3	-6.9	6+217.60	2.52	0.00	780808.861	3120024.62	1563.871	56.0994	-6.9	3	1.2	3.02	0	IP-181/X=780807.938,Y=3120024.000,R=20

LAYOUT DATA																
Left				Chainage	Chainage Difference	Left EW Area	Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks
Pass By	Extra Widening	Carriage Way	Cross Slope								Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By	
0	0	-3	-6.827	6+220.00	2.40	0.00	780808.513	3120025.156	1563.898	57.9302	-6.827	3	1.2	2.88	0	
0	0	-3	-6.788	6+220.12	0.12	0.00	780807.591	3120026.794	1563.9	63.3171	-6.788	3	1.2	0.14	0	rEW=1.2
0	0	-3	-5.494	6+224.12	4.00	0.00	780806.163	3120030.524	1563.946	74.7779	-5.494	3	0.8	3.20	0	EC-181
0	0	-3	-3.592	6+230.00	5.88	0.00	780805.081	3120034.499	1564.014	74.7779	-3.592	3	0.212	1.25	0	
0	0	-3	-2.906	6+232.12	2.12	0.00	780804.062	3120038.243	1564.038	74.7779	-2.906	3	0	0.00	0	rEW=0
0	0	-3	-0.357	6+240.00	7.88	0.00	780802.455	3120044.149	1564.129	74.7779	-0.357	3	0	0.00	0	
0	0	-3	2.346	6+248.35	8.35	0.00	780799.8	3120053.907	1564.226	74.7779	2.346	3	0	0.00	0	IEW=0
0	-0.117	-3	2.723	6+249.52	1.17	0.14	780799.494	3120055.033	1564.239	74.7779	2.723	3	0.117	0.14	0	BC-182
0	-0.165	-3	2.878	6+250.00	0.48	0.08	780799.83	3120053.798	1564.245	74.7779	2.878	3	0.165	0.08	0	
0	-0.175	-3	2.912	6+250.10	0.10	0.02	780799.339	3120055.593	1564.246	74.444	2.912	3	0.175	0.02	0	rEW=0.17
0	-0.175	-3	4	6+255.44	5.34	0.93	780797.771	3120060.694	1564.308	71.386	4	3	0.175	0.93	0	IP-182/X=780797.938,Y=3120060.750,R=100
0	-0.175	-3	4.393	6+260.00	4.56	0.80	780796.84	3120063.335	1564.36	69.7815	4.393	3	0.175	0.80	0	
0	-0.175	-3	4.511	6+260.78	0.78	0.14	780795.934	3120065.704	1564.369	68.3283	4.511	3	0.175	0.14	0	IEW=0.17
0	-0.228	-3	4.599	6+261.36	0.58	0.13	780795.717	3120066.245	1564.376	67.9967	4.599	3	0.117	0.07	0	EC-182
0	-0.334	-3	4.777	6+262.53	1.17	0.39	780795.28	3120067.327	1564.39	67.9967	4.777	3	0	0.00	0	rEW=0
0	-0.732	-3	5.444	6+266.92	4.39	3.21	780793.634	3120071.402	1564.44	67.9967	5.444	3	0	0.00	0	rEW=0
0	-1.011	-3	5.912	6+270.00	3.08	3.11	780793.14	3120072.624	1564.476	67.9967	5.912	3	0.308	0.95	0	
0	-1.253	-3	6.319	6+272.68	2.68	3.36	780791.476	3120076.741	1564.507	67.9967	6.319	3	0.576	1.54	0	BC-183
0	-1.6	-3	6.9	6+276.51	3.83	6.13	780789.677	3120080.11	1564.551	55.8164	6.9	3	0.958	3.67	0	IEW=1.6
0	-1.6	-3	6.9	6+278.42	1.91	3.06	780788.52	3120081.633	1564.573	49.7253	6.9	3	1.15	2.20	0	IP-183/X=780789.250,Y=3120082.250,R=18
0	-1.6	-3	6.9	6+280.00	1.58	2.53	780788.636	3120081.495	1564.593	50.2992	6.9	3	1.308	2.07	0	
0	-1.6	-3	6.9	6+280.33	0.33	0.53	780787.208	3120083.025	1564.598	43.6337	6.9	3	1.341	0.44	0	IEW=1.6
0	-1.742	-3	6.914	6+284.16	3.83	6.67	780784.181	3120085.351	1564.664	31.4568	6.914	3	1.724	6.60	0	EC-183
0	-1.901	-3	6.93	6+288.46	4.30	8.17	780780.513	3120087.595	1564.766	31.4568	6.93	3	2.154	9.26	0	BC-184
0	-1.955	-3	6.935	6+289.92	1.46	2.85	780779.319	3120088.429	1564.807	38.4361	6.935	3	2.3	3.36	0	rEW=2.3
0	-1.957	-3	6.936	6+290.00	0.08	0.16	780780.701	3120087.48	1564.809	31.4568	6.936	3	2.3	0.18	0	
0	-1.982	-3	6.938	6+290.66	0.66	1.31	780778.759	3120088.902	1564.829	41.9365	6.938	3	2.3	1.52	0	IP-184/X=780778.625,Y=3120088.750,R=12
0	-2.009	-3	6.941	6+291.39	0.73	1.47	780778.229	3120089.409	1564.851	45.4389	6.941	3	2.3	1.68	0	rEW=2.3
0	-2.063	-3	6.946	6+292.85	1.46	3.01	780777.272	3120090.507	1564.899	52.4009	6.946	3	2.285	3.34	0	EC-184
0	-2.169	-3	6.957	6+295.72	2.87	6.23	780775.521	3120092.781	1565.003	52.4009	6.957	3	2.254	6.47	0	BC-185
0	-2.271	-3	6.967	6+298.49	2.77	6.29	780774.042	3120095.118	1565.115	62.96	6.967	3	2.225	6.16	0	IP-185/X=780773.812,Y=3120095.000,R=15
0	-2.327	-3	6.973	6+300.00	1.51	3.51	780774.155	3120094.901	1565.18	62.0255	6.973	3	2.209	3.34	0	
0	-2.374	-3	6.977	6+301.25	1.25	2.97	780773.019	3120097.681	1565.233	73.5218	6.977	3	2.196	2.75	0	EC-185
0	-2.377	-3	6.978	6+301.33	0.08	0.19	780772.996	3120097.758	1565.237	73.5218	6.978	3	2.195	0.18	0	BC-186
0	-2.6	-3	7	6+307.37	6.04	15.70	780769.687	3120102.702	1565.495	38.8951	7	3	2.132	12.88	0	IEW=2.6
0	-2.6	-3	7	6+310.00	2.63	6.84	780768.989	3120103.216	1565.6	33.9269	7	3	2.104	5.53	0	required
0	-2.6	-3	7	6+310.40	0.40	1.04	780767.086	3120104.218	1565.613	21.5801	7	3	2.1	0.84	0	IP-186/X=780769.375,Y=3120110.000,R=10
0	-2.6	-3	7	6+313.42	3.02	7.85	780764.151	3120104.891	1565.672	4.2612	7	3	2.068	6.25	0	IEW=2.6
0	-1.996	-3	6.196	6+319.46	6.04	12.06	780758.356	3120103.55	1565.601	329.6568	5.553	3	2.004	12.10	0	EC-186
0	-1.942	-3	6.124	6+320.00	0.54	1.05	780759.442	3120104.099	1565.582	336.6344	5.424	3	1.999	1.08	0	
0	-1.208	-3	5.148	6+327.34	7.34	8.87	780751.555	3120099.569	1565.129	329.6568	3.666	3	1.921	14.10	0	BC-187
0	-1.004	-3	4.877	6+329.37	2.03	2.04	780749.729	3120098.683	1564.94	338.616	3.179	3	1.9	3.86	0	rEW=1.9
0	-0.942	-3	4.794	6+330.00	0.63	0.59	780750.764	3120099.141	1564.88	333.6261	3.029	3	1.9	1.20	0	
0	-0.903	-3	4.742	6+330.39	0.39	0.35	780748.768	3120098.349	1564.843	343.1011	2.936	3	1.9	0.74	0	IP-187/X=780748.875,Y=3120098.000,R=13

LAYOUT DATA																	
Left				Chainage	Chainage Difference		Easting	Northing	Designed Level	Left to Right WCB of Cross Line	Right					Remarks	
Pass By	Extra Widening	Carriage Way	Cross Slope			Left EW Area					Cross Slope	Carriage Way	Extra Widening	Right EW Area	Pass By		
0	-0.801	-3	4.607	6+331.41	1.02	0.82	780747.784	3120098.092	1564.746	347.5845	2.692	3	1.9	1.94	0	rEW=1.9	
0	-0.598	-3	4.336	6+333.44	2.03	1.21	780745.774	3120097.812	1564.552	356.5318	2.205	3	1.697	3.44	0	EC-187	
0	0	-3	3.541	6+339.42	5.98	0.00	780739.808	3120097.45	1563.981	356.5318	0.774	3	1.099	6.57	0	IEW=0	
0	0	-3	3.463	6+340.00	0.58	0.00	780740.983	3120097.522	1563.926	356.5318	0.634	3	1.041	0.60	0		
0	0	-3	2.133	6+350.00	10.00	0.00	780731.001	3120096.917	1562.971	356.5318	-1.761	3	0.041	0.41	0		
						3457.23							2444.97				
Total Extrawidening Area				5902.19													

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal

Pavement Type

Chainage		Length (m)	Pavement Type	Subbase (cm)	Longitudinal Gradient
From	To				
0+000	0+263	263	Flexible	15	< 10%
0+263	0+337	74	Rigid	20	10.02%
0+337	0+387	50	Flexible	15	< 10%
0+387	0+456	69	Rigid	20	11.56%
0+456	0+617	161	Flexible	15	< 10%
0+617	0+711	94	Rigid	20	11.89%
0+711	0+802	91	Flexible	15	< 10%
0+802	0+931	129	Rigid	20	10.38%
0+931	1+097	166	Flexible	15	< 10%
1+097	1+276	179	Rigid	20	11.98%
1+276	1+560	284	Rigid	20	10.81%
1+560	1+705	145	Rigid	20	11.56%
1+705	1+761	56	Flexible	15	< 10%
1+761	2+290	529	Rigid	20	13.24%
2+290	2+632	342	Rigid	20	11.62%
2+632	2+978	346	Flexible	15	< 10%
2+978	3+168	190	Rigid	20	10.48%
3+168	3+292	124	Flexible	15	< 10%
3+292	3+400	108	Rigid	20	11.34%
3+400	3+947	547	Flexible	15	< 10%
3+947	4+246	299	Rigid	20	14.17%
4+246	4+318	72	Flexible	15	< 10%
4+318	4+360	42	Rigid	20	11.95%
4+360	6+350	1990	Flexible	15	< 10%

Total Length of Flexible Pavement =	3866.00 m
Total Length of Rigid Pavement =	2484.00 m
Total Pavement Length =	6350.00 m

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal

Matrix of Hume Pipe Culvert

Chainage	Length (m)	Diameter (m)	Pipe Count	Cover Depth (m)	Remarks
0+620	7.5	0.6	1	0.6	Proposed
0+970	7.5	0.6	1	0.6	Proposed
1+160	7.5	0.6	1	0.6	Proposed
1+330	7.5	0.6	1	0.6	Proposed
1+760	7.5	0.6	1	0.6	Proposed
1+850	7.5	0.6	1	0.6	Existing, Good Condition
2+240	7.5	0.6	1	0.6	Proposed
2+670	7.5	0.6	1	0.6	Proposed
2+947	7.5	0.6	1	0.6	Proposed
3+290	7.5	0.6	1	0.6	Proposed
3+461	7.5	0.6	1	0.6	Proposed
3+700	7.5	0.6	1	0.6	Proposed
3+940	7.5	0.6	1	0.6	Proposed
4+310	7.5	0.6	1	0.6	Proposed
4+990	7.5	0.6	1	0.6	Proposed
5+200	7.5	0.6	1	0.6	Proposed
5+300	7.5	0.6	1	0.6	Proposed
5+360	7.5	0.6	1	0.6	Proposed
5+450	7.5	0.6	1	0.6	Proposed
5+570	7.5	0.6	1	0.6	Proposed
5+880	7.5	0.6	1	0.6	Proposed
6+080	7.5	0.6	1	0.6	Proposed
6+310	7.5	0.6	1	0.6	Proposed

No. of culverts at various other locations=	14	(as required)
No. of 600 mm dia hume pipe culverts=	36	(total proposed)

RATE ANALYSIS

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal
Summary of Rate Analysis

Name of the Road: Sarketari-Aurkharka-Panchase Road (Ch- 0+000 to 7+100)

FY : 2074/75

S.N.	Description of Works	Unit	Final Rate NRs.
1	Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [Manual work]	cu m	1,208.19
2	Road way excavation in Hard soil/Gravels/B.M.S.including necessary disposal and lift etc. as per specification, all complete work. [Manual work]	cu m	805.46
3	Earthwork excavation in Soft Rock for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [Manual work]	cu m	2,416.38
4	Road way excavation in Soft Rock including necessary disposal and lift etc. as per specification, all complete work. [Manual work]	cu m	2,215.02
5	Earthwork excavation in Hard Rock for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [Manual work]	cu m	12,887.36
6	Road way excavation in Hard soil/Gravels/B.M.S.including necessary disposal and lift etc. as per specification, all complete work. [Manual work]	cu m	9,665.52
7	Machine work excavation in BMS (from Syangja District Rate)	cu m	90.00
8	Machine work excavation in Soft Rock (from Syangja District Rate)	cu m	250.00
9	Machine work excavation in Hard Rock (from Syangja District Rate)	cu m	1,100.00
10	Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	cu m	145.91
11	Road way excavation in Hard soil/Gravels/B.M.S.including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	cu m	125.77
12	Earthwork excavation in Soft Rock for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	cu m	358.32
13	Road way excavation in Soft Rock including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	cu m	348.25
14	Earthwork excavation in Hard Rock for drain and trenches including shoring, strutting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	cu m	1,689.37
15	Road way excavation in Hard Rock including necessary disposal and lift etc. as per specification, all complete work. [95% Machine & 5% Manual work]	cu m	1,528.28
16	Formation of embankment including compaction in layers not exceeding 150mm compaction depth, watering and necessary haulage etc. as per specification, all complete work.	cu m	451.34
17	Earth Backfilling in layers including compaction, watering and lead etc., all complete work.	cu m	978.56
18	Providing and laying dry stone masonry soling (coursed rubble) including dressing etc., all complete work.	cu m	4,251.17
19	Providing and placing machine mixed M15/40 cement concrete including compaction, curing, testing and lead etc. all complete as per specification and drawing.	cu m	12,174.36
20	Providing and placing machine mixed Cement concrete M25/20 (1:1:2) for the super-structure, deckslab, girder etc. including compaction, curing, testing and lead etc. as per specification and drawings, all complete work.	cu m	16,907.47
21	Providing and laying Random rubble stone masonry in cement sand mortar [cement(1) : sand(4)] (manual mixing) including scaffolding, curing, preparation of mortar, lead etc., all complete work.	cu m	10,099.59
22	Providing , Preparing and Installing form work including necessary supports and removing after completion ---For Vertical plain surface [class F2 finish] height upto 3 m, all complete work.	sq m	700.93
23	Proving and laying RCC pipes of diameter 600 mm (internal) with collars jointed with stiff mixture of cement mortar in the proportion of 1 : 2 (1 cement : 2 fine sand), lead upto 100m, all complete work.	rm	8,603.84
24	Providing and laying Reinforcement (diameter above 8 mm and upto 16 mm) including cutting, bending, binding, fixing in position and lead etc. all complete as per specification and drawing.	mt.	117,001.00
25	Fabrication of hexagonal mesh type 100mm x 120 mm Gabion boxes/ mattresses with diaphragms, with binding wire 12 swg, mesh wire 10 swg and selvedged wire 8 swg, all heavy coated G.I. wire tying down the lid complete and providing and filling stone/boulder in gabion boxes/ mattresses etc as per drawings and specification, all complete work.	cu m	4,354.36

S.N.	Description of Works	Unit	Final Rate NRs.
26	Providing, laying and fixing of Geo-textile (filter fabrics) with necessary lead and lift, all complete work.	sq m	206.49
27	Providing, laying, spreading, watering, levelling and compaction of natural sand gravel subbase grading as per table 12.1 of standard specifications, all complete work.	cu m	1,844.27
28	Providing, laying, spreading, watering, levelling and compaction of crusher run materials for base course as per specifications, all complete work.	cu m	3,019.29
29	Supply and application of prime coat/tack coat using cutback bitumen including cleaning the surface by wire brushes, brooms etc before applying primecoat.	lit	174.78
30	Providing, mixing, laying and compaction of premix carpet, all complete work.	cu m	15,324.52
31	Providing and laying sand Seal, all complete work.	sq m	117.90
32	Providing, jointing and laying HDP pipes (110 mm outer diameter) with or without collar etc. complete in place as per specification.	Rm	745.43
33	Supplying and applying paint for Road marking including cleaning, watering, brooming etc. all complete (10cm. wide strip): More than two coats over new bitumin surface	Rm	53.72

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal

RATE ANALYSIS

Name of the Road: Sarketari-Aurkharka-Panchase Road (Ch- 0+000 to 7+100)

FY : 2074/75

Excavation

Description of works:		Earthwork excavation in Hard soil/Gravels/B.M.S. for drain and trenches including shoring, struting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work.													Unit : 1 m3		
Spec. cl. No: 905																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
9.02.b	Unskilled	md	1.50	680.00	1020.00						Tools and plant		3.00%	of L.C.	30.60		
Sub total of A =					1020.00	Sub total of B =					0.00	Sub total of C =					30.60
Sub total of A +B + C =					1050.60	Contractor's overhead expenses 15% =					157.59	Unit Rate =					1208.19

Description of works:		Road way excavation in Hard soil/Gravels/B.M.S.including necessary disposal and lift etc. as per specification, all complete work.													Unit : 1 m3		
Spec. cl. No: 905																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
9.01.b	Unskilled	md	1.00	680.00	680.00						Tools and plant		3.00%	of L.C.	20.40		
Sub total of A =					680.00	Sub total of B =					0.00	Sub total of C =					20.40
Sub total of A +B + C =					700.40	Contractor's overhead expenses 15% =					105.06	Unit Rate =					805.46

Description of works:		Earthwork excavation in Soft Rock for drain and trenches including shoring, struting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work.													Unit : 1 m3		
Spec. cl. No: 905																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
9.02.c	Unskilled	md	3.00	680.00	2040.00						Tools and plant		3.00%	of L.C.	61.20		
Sub total of A =					2040.00	Sub total of B =					0.00	Sub total of C =					61.20
Sub total of A +B + C =					2101.20	Contractor's overhead expenses 15% =					315.18	Unit Rate =					2416.38

Description of works:		Road way excavation in Soft Rock including necessary disposal and lift etc. as per specification, all complete work.													Unit : 1 m3	
Spec. cl. No: 905																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
9.01.c	Unskilled	md	2.75	680.00	1870.00						Tools and plant		3.00%	of L.C.	56.10	
Sub total of A =					1870.00	Sub total of B =					0.00	Sub total of C =				56.10
Sub total of A +B + C =					1926.10	Contractor's overhead expenses 15% =					288.92	Unit Rate =				2215.02

Description of works:		Earthwork excavation in Hard Rock for drain and trenches including shoring, struting, bracing, sheeting and necessary disposal and lift etc. as per specification, all complete work.													Unit : 1 m3		
Spec. cl. No: 905																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
9.02.d	Unskilled	md	16.00	680.00	10880.00						Tools and plant		3.00%	of L.C.	326.40		
Sub total of A =					10880.00	Sub total of B =					0.00	Sub total of C =					326.40
Sub total of A +B + C =					11206.40	Contractor's overhead expenses 15% =					1680.96	Unit Rate =					12887.36

Description of works:		Road way excavation in Hard Rock including necessary disposal and lift etc. as per specification, all complete work.													Unit : 1 m3	
Spec. cl. No: 905																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
9.01.d	Unskilled	md	12.00	680.00	8160.00						Tools and plant		3.00%	of L.C.	244.80	
Sub total of A =					8160.00	Sub total of B =					0.00	Sub total of C =				244.80
Sub total of A +B + C =					8404.80	Contractor's overhead expenses 15% =					1260.72	Unit Rate =				9665.52

Earthfilling in Compaction

Description of works:		Formation of embankment including compaction in layers not exceeding 150mm compaction depth, watering and necessary haulage etc. as per specification, all complete work.													Unit : 1 m3	
Spec. cl. No: 909																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
9.05	Unskilled	md	0.50	680.00	340.00	Suitable excavated material to be used.					Roller 8 to 10 tonnes	hr	0.017	585.63	9.95	
						Fuel	lit	0.08	91.50	7.32	Tools and plant		3.00%	of L.C.	10.20	
						Water	lit	100	0.25	25.00						
	Sub total of A =				340.00	Sub total of B =				32.32	Sub total of C =				20.15	
Sub total of A +B + C =					392.47	Contractor's overhead expenses 15% =					58.87	Unit Rate =				451.34

Description of works:		Earth Backfilling in layers including compaction, watering and lead etc., all complete work.													Unit : 1 m3	
Spec. cl. No: 908																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
9.10.a	Unskilled	md	1.140	680.00	775.20	Suitable excavated material to be used.					Vibrator Roller 1 to 1.5 tonnes	hr	0.110	385.63	42.41	
adjusted						Diesel	lit	0.11	91.50	10.06	Tools and plant		3.00%	of L.C.	23.25	
	Sub total of A =				775.20	Sub total of B =				10.06	Sub total of C =				65.66	
Sub total of A +B + C =					850.92	Contractor's overhead expenses 15% =					127.64	Unit Rate =				978.56

Soling Works

Description of works:		Providing and laying dry stone masonry soling (coursed rubble) including dressing etc., all complete work.													Unit : 1 m3
Spec. cl. No: 2602, 2603, 2608															
Norms No.	Labour (A)					Material (B)					Equipment (C)				
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount
26.01	Skilled	md	1.25	890.00	1112.50	Blockstone	m ³	1.00	1000.00	1000.00	Tools and plant		3.00%	of L.C.	74.17
	Unskilled	md	2.00	680.00	1360.00	Bond stone	m ³	0.15	1000.00	150.00					
Sub total of A =					2472.50	Sub total of B =				1150.00	Sub total of C =				74.17
Sub total of A +B + C =					3696.67	Contractor's overhead expenses 15% =				554.50	Unit Rate =				4251.17

Concreting Works

Description of works:		Providing and placing machine mixed M15/40 cement concrete including compaction, curing, testing and lead etc. all complete as per specification and drawing.													Unit : 1 m3
Spec. cl. No: 2000															
Norms No.	Labour (A)					Material (B)					Equipment (C)				
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount
20.01.a.ii	Skilled	md	0.50	890.00	445.00	cement	t	0.260	15700.00	4082.00	Mixer (0.28/0.20 m ³)	hr	0.60	1000.00	600.00
	Unskilled	md	3.50	680.00	2380.00	aggregate 20-40mm	m ³	0.530	1800.00	954.00					
						aggregate 10-20mm	m ³	0.240	2000.00	480.00	Mix Design and Quality Control		2.50%	of Cost of concrete	258.2
						aggregate 10mm & down	m ³	0.110	2100.00	231.00					
						coarse sand	m ³	0.460	1800.00	828.00					
						petrol	lit	0.100	109.50	10.95					
						diesel	lit	3.000	91.50	274.50					
						water	lit	171.000	0.25	42.75					
Sub total of A =					2825.00	Sub total of B =				6903.20	Sub total of C =				858.20
Sub total of A +B + C =					10586.40	Contractor's overhead expenses 15% =				1587.96	Unit Rate =				12174.36

Description of works:		Providing and placing machine mixed Cement concrete M25/20 (1:1:2) for the super-structure, deckslab, girder etc. including compaction, curing, testing and lead etc. as per specification and drawings, all complete work.													Unit : 1 m3					
Spec. cl. No: 2000																				
Norms No.	Labour (A)					Material (B)					Equipment (C)									
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount					
20.03.a (ii)	Skilled	md	0.80	890.00	712.00	cement	t	0.375	15700.00	5887.50	Mixer (0.28/0.2 m3)	hr	0.60	1,000.00	600.00					
adjusted	Unskilled	md	6.00	680.00	4080.00	aggregate 10-20mm	m³	0.580	2000.00	1160.00										
	Operator	md	0.20	685.04	137.00	aggregate10mm & down	m³	0.300	2100.00	630.00										
						coarse sand	m³	0.450	1800.00	810.00	Mix Design and Quality Control		2.50%	of Cost of concrete	343.95					
						petrol	lit	0.100	109.50	10.95										
												diesel	lit	3.000	91.50	274.50				
												water	lit	225.000	0.25	56.25				
Sub total of A =					4929.00	Sub total of B =					8829.20	Sub total of C =				943.95				
Sub total of A +B + C =					14702.15	Contractor's overhead expenses 15% =					2205.32	Unit Rate =				16907.47				

Stone Masonry Works

Description of works:		Providing and laying Random rubble stone masonry in cement sand mortar [cement(1) : sand(4)] (machine mixing) including scaffolding, curing, preparation of mortar, lead etc., all complete work.													Unit : 1 m3					
Spec. cl. No: 2607																				
Norms No.	Labour (A)					Material (B)					Equipment (C)									
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount					
26.04.b	Skilled	md	1.50	890.00	1335.00	Cement	t	0.155	15700.00	2433.50	mixer (0.28/ 0.20 m3)	hr.	0.15	1000.00	557.25					
adjusted	Unskilled	md	3.50	680.00	2380.00	Sand	m ³	0.450	1800.00	810.00										
						Stone	m ³	1.150	1000.00	1150.00										
						diesel	lit	1.000	91.50	91.50										
						water	lit	100.000	0.2500	25.00										
Sub total of A =					3715.00	Sub total of B =					4510.00					Sub total of C =				
Sub total of A +B + C =					8782.25	Contractor's overhead expenses 15% =					1317.34	Unit Rate =					10099.59			

Wooden Formworks

Description of works:		Providing , Preparing and Installing form work including necessary supports and removing after completion ---For Vertical plain surface [class F2 finish] height upto 3 m, all complete work.										Unit : 10 m2	
Spec. cl. No: 1804,1805													
Norms No.	Labour (A)					Material (B)							
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Remarks		
18.02.01.a.i	Skilled	md	2.20	890.00	1958.00	Struts, ballies etc.	m3	0.40	3825.76	1530.30	12 times usage		
adjusted	Unskilled	md	2.20	680.00	1496.00	Nails,spikes etc.	kg	2.50	100.00	250.00			
						Plywood 9mm thick	m2	11.00	78.25	860.75	8 times usage		
Sub total of A =					3454.00	Sub total of B =					2641.05		
Sub total of A +B =					6095.05	Contractor's overhead expenses 15% =					914.26	Unit Rate :	7009.31
											Unit Rate (1 m2) =		700.93

Hume Pipes

Description of works:		Proving and laying RCC pipes of diameter 600 mm (internal) with collars jointed with stiff mixture of cement mortar in the proportion of 1 : 2 (1 cement : 2 fine sand), lead upto 100m, all complete work.													Unit : 1 rm		
Spec. cl. No: 701																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
7.02 (i)	Skilled	md	0.281	890.00	250.09	RCC Pipe	m	1.00	6134.70	6134.70	Ballies, crow, bars, chain, pulleys, block, ropes etc.		3.00%	of total cost	217.91		
	Unskilled	md	1.094	680.00	743.92	Cement	kg	6.813	15.70	106.96							
						Sand	m ³	0.009	1800.00	16.20							
						Jute	kg	0.219	54.00	11.82							
Sub total of A =					994.01	Sub total of B =					6269.68	Sub total of C =					217.91
Sub total of A +B + C =					7481.60	Contractor's overhead expenses 15% =					1122.24	Unit Rate =					8603.84

Gabion Works

Description of works:		Fabrication of [3 x 1 x 1 : (16 sq. m)] hexagonal mesh type 100mm x 120 mm Gabion boxes / mattresses with diapharagms, with binding wire 12 swg, mesh wire 10 swg and selvedged wire 8 swg, all heavy coated G.I. wire, including rolling, cutting and weaving ; assembling Gabion boxes mattresses, palcing in position including stretching, forming compartments; tying with bracing wires and tie wires; tying down the lid complete; and providing and filling stone / boulder in gabion boxes / mattresses etc. including dressing, beding, bonding and all transporation as per specification.													Unit : 1 box	
Spec. cl. No: 2401																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
Fabrication of box: Activity no : 24.01.02 (a) adjusted											Necessary testing of materials		2% of M.C.		143.66	
	Skilled	md	0.50	890.00	445.00	Mesh wire(10 SWG)	kg	35.10	95.00	3334.50						
	Unskilled	md	0.22	680.00	149.60	Selvedge wire (8 SWG)	kg	3.91	95.00	371.51						
Filling of stones : Activity no : 24.02.04 adjusted																
	Skilled	md	0.75	890.00	667.50	Block stone	m3	3.00	1000.00	3000.00						
	Unskilled	md	2.25	680.00	1530.00	Bond stone	m3	0.30	1000.00	300.00						
Tying of lids: Activity no : 24.02.01 (a) adjusted																
	Unskilled	md	1.04	680.00	707.20	Binding wire(12 SWG)	kg	1.81	98.00	177.38						
Sub total of A =					3499.30	Sub total of B =					7183.39	Sub total of C =				143.66
Sub total of A +B + C =					10826.35	Contractor's overhead expenses 15% =					1623.95	Unit Rate =				12450.30
												Unit Rate (per cu.m) =				4150.10
Description of works:		Fabrication of [2 x 1 x 1 : (11sq. m)] hexagonal mesh type 100mm x 120 mm Gabion boxes / mattresses with diapharagms, with binding wire 12 swg, mesh wire 10 swg and selvedged wire 8 swg, all heavy coated G.I. wire, including rolling, cutting and weaving ; assembling Gabion boxes mattresses, palcing in position including stretching, forming compartments; tying with bracing wires and tie wires; tying down the lid complete; and providing													Unit : 1 box	
Spec. cl. No: 2401																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
Fabrication of box: Activity no : 24.01.02(b) adjusted											Necessary testing of materials		2% of M.C.		98.05	
	Skilled	md	0.34	890.00	302.60	Mesh wire (10 SWG)	Kg	24.15	95.00	2294.25						
	Unskilled	md	0.15	680.00	102.00	Selvedge wire (8 SWG)	Kg	2.96	95.00	280.89						
Filling of stones : Activity no : 24.02.04 adjusted																
	Skilled	md	0.50	890.00	445.00	Block stone	m3	2.00	1000.00	2000.00						
	Unskilled	md	1.50	680.00	1020.00	Bond stone	m3	0.20	1000.00	200.00						

Tying of lids: Activity no : 24.02.01(b) adjusted															
	Unskilled	md	0.75	680.00	510.00	Binding wire(12 SWG)	kg	1.30	98.00	127.40					
Sub total of A =					2379.60	Sub total of B =					4902.54	Sub total of C =			98.05
Sub total of A +B + C =					7380.19	Contractor's overhead expenses 15% =					1107.03	Unit Rate =			8487.22
											Unit Rate (per cu.m) =			4243.60	
Description of works:		Fabrication of [1.5 x 1 x 1 : (9 sq. m)] hexagonal mesh type 100mm x 120 mm Gabion boxes / mattresses with diapharagms, with binding wire 12 swg, mesh wire 10 swg and selvedged wire 8 swg, all heavy coated G.I. wire, including rolling, cutting and weaving ; assembling Gabion boxes mattresses, palcing in position including stretching, forming compartments; tying with bracing wires and tie wires; tying down the lid complete; and providing												Unit : 1 box	
Spec. cl. No: 2401															
Norms No.	Labour (A)					Material (B)					Equipment (C)				
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount
Fabrication of box: Activity no : 24.01.02(c) adjusted											Necessary testing of materials		2% of M.C.		78.09
	Skilled	md	0.28	890.00	249.20	Mesh wire (10 SWG)	Kg	19.75	95.00	1876.25					
	Unskilled	md	0.12	680.00	81.60	Selvedge wire (8 SWG)	Kg	2.70	95.00	256.18					
Filling of stones : Activity no : 24.02.04 adjusted															
	Skilled	md	0.38	890.00	333.75	Block stone	m3	1.50	1000.00	1500.00					
	Unskilled	md	1.13	680.00	765.00	Bond stone	m3	0.15	1000.00	150.00					
Tying of lids: Activity no : 24.02.01(c) adjusted															
	Unskilled	md	0.68	680.00	462.40	Binding wire(12 SWG)	kg	1.25	98.00	122.50					
Sub total of A =					1891.95	Sub total of B =					3904.93	Sub total of C =			78.09
Sub total of A +B + C =					5874.97	Contractor's overhead expenses 15% =					881.25	Unit Rate =			6756.22
											Unit Rate (per cu.m) =			4504.14	

Description of works:		Fabrication of [1 x 1 x 1 : (6 sq. m)] hexagonal mesh type 100mm x 120 mm Gabion boxes / mattresses with diapharagms, with binding wire 12 swg, mesh wire 10 swg and selvaged wire 8 swg, all heavy coated G.I. wire, including rolling, cutting and weaving ; assembling Gabion boxes mattresses, palcing in position including stretching, forming compartments; tying with bracing wires and tie wires; tying down the lid complete; and providing													Unit : 1 box	
Spec. cl. No: 2401																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
Fabrication of box: Activity no : 24.01.02(d) adjusted											Necessary testing of materials		2% of M.C.		52.31	
	Skilled	md	0.19	890.00	169.10	Mesh wire (10 SWG)	Kg	13.16	95.00	1250.20						
	Unskilled	md	0.08	680.00	54.40	Selvedge wire (8 SWG)	Kg	2.01	95.00	191.10						
Filling of stones : Activity no : 24.02.04 adjusted																
	Skilled	md	0.25	890.00	222.50	Block stone	m3	1.00	1000.00	1000.00						
	Unskilled	md	0.75	680.00	510.00	Bond stone	m3	0.10	1000.00	100.00						
Tying of lids: Activity no : 24.02.01(d) adjusted																
	Unskilled	md	0.45	680.00	306.00	Binding wire(12 SWG)	Kg	0.76	98.00	74.48						
Sub total of A =					1262.00	Sub total of B =					2615.78	Sub total of C =				52.31
Sub total of A +B + C =					3930.09	Contractor's overhead expenses 15% =					589.51	Unit Rate =				4519.60
												Unit Rate (per cu.m) =				4519.60

Reinforcement Works

Description of works:		Providing and laying Reinforcement (diameter above 8 mm and upto 16 mm) including cutting, bending, binding, fixing in position and lead etc. all complete as per specification and drawing.													Unit : 1 mt.	
Spec. cl. No: 2000																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
20.07.2	Skilled	md	12.00	890.00	10680.00	Reinforcement	t	1.05	78000.00	81900.00						
	Unskilled	md	12.00	680.00	8160.00	Binding wire	kg	10.00	100.00	1000.00						
Sub total of A =					18840.00	Sub total of B =					82900.00	Sub total of C =				0.00
Sub total of A +B + C =					101740.00	Contractor's overhead expenses 15% =					15261.00	Unit Rate =				117001.00

Geotextiles

Description of works:		Providing, laying and fixing of Geo-textile (filter fabrics) with necessary lead and lift, all complete work.													Unit : 1 m2		
Spec. cl. No: 2404																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
24.09	Unskilled	md	0.0170	680.00	11.56	Geotextiles	m2	1.20	140.00	168.00							
Sub total of A =					11.56	Sub total of B =					168.00	Sub total of C =					0.00
Sub total of A +B + C =					179.56	Contractor's overhead expenses 15% =					26.93	Unit Rate =					206.49

Road Pavement Works

Description of works:		Providing, laying, spreading, watering, levelling and compaction of natural sand gravel subbase grading as per table 12.1 of standard specifications, all complete work.													Unit : 1 m ³		
Spec. cl. No: 1201																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
12.01	Skilled	md	0.0050	890.00	4.45	Subbase aggregates	cu.m.	1.2800	1100.00	1408.00	Grader	hr	0.0220	1685.63	37.08		
	Unskilled	md	0.0400	680.00	27.20	Diesel	lit	0.7920	91.50	72.46	Vibrator roller	hr	0.0220	885.63	19.48		
											Water bowser	hr	0.0380	608.13	23.10		
											Loader	hr	0.0110	1085.63	11.94		
Sub total of A =					31.65	Sub total of B =					1480.46	Sub total of C =					91.60
Sub total of A +B + C =					1603.71	Contractor's overhead expenses 15% =					240.56	Unit Rate =					1844.27

Description of works:		Providing, laying, spreading, watering, levelling and compaction of crusher run materials for base course as per specifications, all complete work.													Unit : 1 m3	
Spec. cl. No: 1202																
Norms No.	Labour (A)					Material (B)					Equipment (C)					
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	
12.06	Skilled	md	0.005	890.00	4.45	Base agg.	cu.m	1.200	2000.00	2400.00	Grader	hr	0.033	1,685.63	55.62	
	Unskilled	md	0.020	680.00	13.60	Diesel	lit	0.990	91.50	90.58	Vibrator Roller	hr	0.033	885.63	29.22	
											Water bowser	hr	0.033	608.13	20.06	
											Loader	hr	0.011	1,085.63	11.94	
Sub total of A =					18.05	Sub total of B =					2490.58	Sub total of C =				116.84
Sub total of A +B + C =					2625.47	Contractor's overhead expenses 15% =					393.82	Unit Rate =				3019.29

Description of works:		Supply and application of prime coat/tack coat using cutback bitumen including cleaning the surface by wire brushes, brooms etc before applying primecoat.													Unit : 1 lit
Spec. cl. No: 1301, 1303															
Norms No.	Labour (A)					Material (B)					Equipment (C)				
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount
13.01, 13.03	Skilled	md	0.003	890.00	2.67	Bitumen	lit	1.050	75.00	78.75	Boiler	hr	0.0025	238.13	0.59
	Unskilled	md	0.046	680.00	31.28	Kerosene	lit	0.100	91.50	9.15	Sprayer	hr	0.0025	1,385.63	3.46
						Diesel	lit	0.275	91.50	25.16	Air Compressor	hr	0.003	308.13	0.92
Sub total of A =					33.95	Sub total of B =				113.06	Sub total of C =				4.97
Sub total of A +B + C =					151.98	Contractor's overhead expenses 15% =					22.80	Unit Rate =			174.78

Description of works:		Providing, mixing, laying and compaction of premix carpet, all complete work.													Unit : 1 m3
Spec. cl. No: 1307, 1308															
Norms No.	Labour (A)					Material (B)					Equipment (C)				
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount
13.09	Skilled	md	0.450	890.00	400.50	Bitumen	lit	77.000	75.00	5775.00	Roller	hr	0.50	585.63	292.81
	Unskilled	md	4.500	680.00	3060.00	Kerosene	lit	7.700	91.50	704.55	Sprayer	hr	0.50	1,385.63	692.81
						Aggregates	cu.m	1.200	2000.00	2400.00					
Sub total of A =					3460.50	Sub total of B =				8879.55	Sub total of C =				985.62
Sub total of A +B + C =					13325.67	Contractor's overhead expenses 15% =					1998.85	Unit Rate =			15324.52

Description of works:		Providing and laying sand Seal, all complete work.													Unit : 10 m2		
Spec. cl. No: 1301, 1305																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
13.07	Skilled	md	0.100	890.00	89.00	Bitumen	lit	6.600	75.00	495.00	Boiler	hr	0.04	238.13	9.52		
	Unskilled	md	0.140	680.00	95.20	Kerosene	lit	0.100	91.50	9.15	Roller	hr	0.04	585.63	23.42		
						Diesel	lit	0.810	91.50	74.11	Sprayer	hr	0.01	1,385.63	13.85		
						Fine Aggregates	cu.m	0.120	1800.00	216.00							
Sub total of A =					184.20	Sub total of B =					794.26	Sub total of C =					46.79
Sub total of A +B + C =					1025.25	Contractor's overhead expenses 15% =					153.79	Unit Rate (10 m2) =					1179.04
												Unit Rate (1 m2) =					117.9

HDP Pipes

Description of works:		Providing, jointing and laying HDP pipes (110 mm outer diameter) with or without collar etc. complete in place as per specification.													Unit : 50 m		
Spec. cl. No: 701																	
Norms No.	Labour (A)					Material (B)					Equipment (C)						
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount		
7.01	Skilled	md	3.0	890.00	2670.00	HDP pipe	m	50.00	425.75	21287.50	Blow Torch	No.	5.00	1000.00	5000.00		
	Unskilled	md	3.0	680.00	2040.00	Petrol	lit	5.00	109.50	547.50	Screw Jack	hr.	8.00	108.13	865.04		
Sub total of A =					4710.00	Sub total of B =					21835.00	Sub total of C =					5865.04
Sub total of A +B + C =					32410.04	Contractor's overhead expenses 15% =					4861.51	Rate (50 m)=					37271.55
												Rate (1 m)				745.43	

Road marking paint

Description of works:		Supplying and applying paint for Road marking including cleaning, watering, brooming etc. all complete (10cm. wide strip):													Unit : 1 m
Spec. cl. No: 1502		More than two coats over new bitumin surface													
Norms No.	Labour (A)					Material (B)					Equipment (C)				
	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount	Type	Unit	Qty.	Rate	Amount
15.02 (b)	Skilled	md	0.005	890.00	4.45	Road marking paint	lit	0.075	500.00	37.50					
	Unskilled	md	0.007	680.00	4.76										
Sub total of A =					9.21	Sub total of B =				37.50	Sub total of C =				0.00
Sub total of A +B + C =					46.71	Contractor's overhead expenses 15% =				7.01	Unit Rate =				53.72

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal

Equipment Operating and Owning Cost Per Hour

Name of the Road: Sarketari-Aurkharka-Panchase Road (Ch- 0+000 to 7+100)

FY : 2074/75

Total Equipment Hire Rate= Hire Rate + Operator's Charge

S. No.	Machine/ Equipment	Operator Class 1	Operator Class 2	Operator Cost (Class 1)	Operator Cost (Class 2)	Hire Charge/Hr	Total Rate per Hr	Reference	DOR Code
1	ASPHALT PAVER (Fuel 0.15 Ltr/HP)	1	2	85.63	116.26	1400.00	1,601.89	DOR	
2	BITUMEN DISTRIBUTOR	1	-	85.63	-	1300.00	1,385.63	DOR	032 -
3	PNEUMATIC TYRED ROLLER	1	-	85.63	-	1200.00	1,285.63	DOR	096 -
4	VIBRATOR ROLLER (less than 1.5 tonnes)	1	-	85.63	-	300.00	385.63	DOR	098 -
5	SELF PROP. VIBRATOR ROLLER (upto 6 tonnes)	1	-	85.63	-	800.00	885.63	DOR	101 -
6	3 WHEELED ROLLER (upto 12 tonnes)	1	-	85.63	-	500.00	585.63	DOR	094-
7	CHIPS SPREADER	1		85.63	-	300.00	385.63	DOR	057 -
8	TRACTOR	Included in hire rate					625.00	Syangja District Rate	
9	WHEEL LOADER / BACKHOE EXCAVATOR	1	-	85.63	-	1000.00	1,085.63	DOR	
10	WHEEL LOADER (1.75 to 2.5 cu.m)	1	-	85.63	-	1000.00	1,085.63	DOR	068 -
11	TRUCK (10 tonnes)	Included in hire rate					1,125.00	Syangja District Rate	
12	AIR COMPRESSOR (150 To 275cfm)	-	1	-	58.13	250.00	308.13	DOR	017 -
13	ASPHALT PLANT (50 T/HR.)	1	2	85.63	116.26	1000.00	1,201.89	DOR	
14	WATER TANKER	-	1	-	58.13	550.00	608.13	DOR	119 -
15	WATER PUMP, 800 ltr/min (5 HP)	-	1	-	58.13	150.00	208.13	DOR	085 -
16	EXCAVATOR (Fuel= 0.125 Ltr/HP)	1	-	85.63	-	1800.00	1,885.63	DOR	
17	EXCAVATOR (PC 200)	1	-	85.63	-	2100.00	2,185.63	DOR	
18	SELF PRO. PNEUMATIC TYRED ROLLER (PTR) (3.13T)	1	-	85.63	-	1200.00	1,285.63	DOR	
19	MOTOR GRADER	1	-	85.63	-	1600.00	1,685.63	DOR	055 -
20	BOILER	-	1	-	58.13	180.00	238.13	DOR	062 -
21	GENERATOR (upto 10 kva)	-	1	-	58.13	150.00	208.13	DOR	
22	CONCRETE MIXER & VIBRATOR	Included in hire rate					1,000.00	Syangja District Rate	
23	SCREW JACK	-	1	-	58.13	50.00	108.13		
24	BLOW TORCH	Included in hire rate					1,000.00		

Phedikhola Rural Municipality
Office of Rural Municipal Executive
Phedikhola, Syangja, Nepal
District Rates

District: Syangja

FY : 2074/75

(A) District Rate: Manpower				
S.N.	Particulars	Unit	Rate	Remarks
1	Labour- Unskilled	md	680.00	
2	Labour- Skilled	md	890.00	
3	Foreman	md	680.00	

(B) District Rate: Materials						
S.N.	Particulars	Unit	Material Rate	Transportation Rate	Adopted Rate	Remarks
1	Cement-OPC	bag	785.00	-	785.00	50 kg bag
3	Sand	cu m	1,800.00	-	1,800.00	
4	Aggregates- below 10 mm	cu m	2,100.00	-	2,100.00	
5	Aggregates- 10 to 20 mm	cu m	2,000.00	-	2,000.00	
6	Aggregates- 20 to 40 mm	cu m	1,800.00	-	1,800.00	
7	River bed Gravel 65mm down	cu m	1,100.00	-	1,100.00	
8	Block Stone	cu m	1,000.00	-	1,000.00	
9	Bond Stone	cu m	1,000.00	-	1,000.00	
10	Water	Litres	0.25	-	0.25	
13	RCC Hume pipe (NP3)- 600 mm internal diameter	m	5,577.00	557.70	6,134.70	10% transportation for 10-50 km from factory
16	Jute	kg	54.00	-	54.00	
17	Nails, Spikes etc.	kg	100.00	-	100.00	
18	Plywood 9mm thick	sq m	626.00	-	626.00	
19	GI Wire- Medium Coated (8, 10 & 12 SWG)	kg	95.00	-	95.00	Mesh & Selvedged wire
20	GI Wire- Heavy Coated (8, 10 & 12 SWG)	kg	98.00	-	98.00	Binding wire
21	Local wood	cu m	45,909.11	-	45,909.11	
22	Reinforcement 8mm	kg	80.00	-	80.00	
23	Reinforcement 10-20mm	kg	78.00	-	78.00	
24	Binding Wire (Black)	kg	100.00	-	100.00	
25	Geo-textiles	sq m	140.00	-	140.00	
27	Road Marking paint	lit	500.00	-	500.00	
28	110 mm HDP Pipe (4 kgf/cm ²)	m	425.75		425.75	
30	Bitumen	Kg	75.00	-	75.00	80/100 grade

(C) District Rate: Fuel				
Ref No.	Particulars	Unit	Rate	Remarks
1	Diesel	litre	91.50	NOC rate
2	Petrol	litre	109.50	NOC rate
3	Kerosene	litre	91.50	NOC rate

References:

Syangja District Rate: FY-074/75
Nepal Oil Corporation website as of 2075/02/02